

THE CHEMIST & DRUGGIST

REGISTERED AS A NEWSPAPER

No. 1827 **JANUARY 30, 1915** Vol. LXXXVI
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Summer & Winter Issues 1/- each.

WINTER ISSUE

Manufacturers of
MALT PREPARATIONS
NORWEGIAN COD LIVER OIL
COD LIVER OIL EMULSION
EFFERVESCENT PREPARATIONS

INCLUDING EFF. SALINE & EFF. CITRATE OF MAGNESIA.

Supplied Packed or in Bulk. Special Quotations to Buyers in Quantity.

ALLEN & HANBURYS LTD., LONDON.

SEE OUR INSET IN THIS ISSUE

THE . . .
NEW YEAR'S
RESOLUTION

TO PUSH

Wright's
Coal Tar Soap

IT PAYS WELL, and
the PRIZES offered for
WINDOW DISPLAYS
are MOST LIBERAL.



TWO SERIES A YEAR.

CHILBLAIN REMEDIES

CHILBLAIN TABLETS.

Made in accordance with the
formula recommended by
Sir A. E. Wright, M.D.,

and the

"Chemist and Druggist,"
1907, Vol. I,
pp. 35 and 126.

Chilblains are caused by thinness of the blood,
which permits of effusion into the tissues and con-
sequent swelling and inflammation. It is thus easy
of comprehension that the ideal cure for Chilblains
is an internal one.

CHILBLAIN TABLETS IN
SILENT SALESMAN OUTERS.

3/6

per doz.

SMART SHOWCARD supplied with all orders.
BEAUTIFUL LABEL.

Own Name and Address on three dozen lots.



RAMELINE CREAM.

The External Chilblain Application.



As the Public will have an external application for Chilblains, there
is no doubt that **Rameline Cream** is the finest preparation of its
kind on the market. Composed of Cold Cream, Adeps Lanæ
Ol. Wintergreen and Menthol, it is splendid, especially when used in
conjunction with the **Chilblain Tablets** described above.

5/6 per doz. 3 doz. lots **5/-**

One dozen lots of this line may bear your name and address.

ARTHUR H. COX & CO. LTD

Manufacturing Chemists

BRIGHTON
ENGLAND

B.P. 1914.

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CONCENTRATED
LIQUORS**

For nearly forty years have been in daily use by progressive pharmacists in all parts of the Empire.

During the whole of that period no Tincture, Infusion or Syrup made therefrom has failed to respond to the characters and tests laid down in successive Pharmacopoeias.

Could any argument be so cogent as this fact, or could any eulogium surpass it?

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One dozen—36/- net, carriage forward.

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VIBRONA and BRONAMALT are on the P.A.T.A. List.

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The entire constituents of
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IN A HIGHLY CONCENTRATED FORM.

"Deserves the gratitude of medicine and pharmacy."—THE CHEMIST AND DRUGGIST.

When a pint of Spirit. Ether. Nit. is required, it is simply necessary to pour into a measure 19 fluid ounces of 90 per cent. Alcohol, sp. gr. '834, snap off the end of a cartridge of ITROSYL, and empty the contents into the Alcohol.

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For Diacetic Acid (Yellow Reagent).

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TO
Pharmaceutical Chemists
of the British Empire!



For **BRITISH-MADE**
PARAFFINUM
LIQUIDUM P.B.

Watch This Page

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BRANCH OFFICES: MELBOURNE, SYDNEY, AND ADELAIDE, AUSTRALIA.

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The next occasion when we can receive Circulars and Price Lists for insertion will be the Summer Number, to be published on SATURDAY, JULY 31, 1915.

We ask Advertisers to give this matter their attention now, and to communicate with THE PUBLISHER, "THE CHEMIST AND DRUGGIST,"
42 CANNON STREET LONDON, E.C., who will be happy to give further particulars if desired.

THE BUYERS' GUIDE.

contracts current for advertising in this journal are mentioned. The headings refer generally to the classes of goods actually advertised, but not a detailed Guide such as appears in "The Chemist and Druggist Diary." Inquiries addressed to the "Information Department," THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C., regarding articles not appearing in these pages receive prompt attention, as shown weekly in the editorial part of the paper.

Absolute Alcohol
Burroughs, J., Ltd.

Acetyl Cellulose
Safety Celluloid Co., Ltd.

Acetyl Salicylic Acid
Bayer Co., Ltd.
Bush, W. J., & Co., Ltd.
Castle Laboratory
Kerfoot, Thos., & Co.
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Pure Aeration Supply, Ltd.

Aerated-Water Materials
Barnett & Foster
Boake Roberts & Co., Ltd.
Bush, W. J., & Co., Ltd.
Huy, William, Ltd.
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Camwall, Ltd.
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Lorimer, John
Sanitas Co., Ltd.
Western Dental Mfg. Co., Ltd.
Young, R. & Co., Ltd.
Zimmermann, C. & Co.
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Louthouse & Saltmer, Ltd.
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Roques, Ferdinand

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Churchill, J. & A.
Greenwood, H., & Co., Ltd.
Martindale's "Extra Pharm"
"Spitalia, The"
Squire's "Companion"

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Newhall & Mason
Potter & Clarke, Ltd.

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Barnett & Foster
Beaton, Clark & Co., Ltd.
Ferry, T., & Son, Ltd.
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Swales, Thomas
Universal Bottle Co.
Youlden, E., Ltd.

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Roques Ferdinand

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Cachous
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Calf Lymph
Heinemann, W.

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Betts & Co., Ltd.
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Viscose Development Co., Ltd.
(Self-fixing and Airtight)

Capsuled Pills
McKesson & Robbins

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Warwick Bros., Ltd.

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Securitas Co., Ltd.

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Menditt, Ltd.

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Southall Bros. & Barclay, Ltd.

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Senior, Alf., & Co.

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Roques, Ferdinand

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Hertz & Co.

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Wright, Layman & Umney, Ltd.

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Pelliot, Henri, & Cie
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Prescott & Co.

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May & Baker, Ltd.
Tyrer, T., & Co., Ltd.
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Tasmanian Eucalypti
Stevenson & Howie

Evaporates
Forshaw, E., & Son

Extract of
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Potter & Clarke, Ltd.

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Cavassus Lescher & Webb, Ltd.
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Hicks, James J.
Ransom, W., & Son
Stevenson, H. E., & Co.

Factory, & Sites
Great Western
Kiln

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Bush, H. W., & Co.
Jaw, S., Son & Sons
Sauson, Henry
Schutze, F., & Co., Ltd.

Filling Machines
Forgrove Machinery Co., Ltd.
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Filter Presses
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Postlipolis
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Floral Oils
St. venous & Ho

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Kay Bros, Ltd.
Smith, Jno. H.
Tunbridge & W.

Flycatchers
Ford Shapland
Kay Bros, Ltd.
Smith, Jno. H.
Tunbridge & W.

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Smith, Jno. H.
Tunbridge & W.

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Smith, Jno. H.
Tunbridge & W.

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Kay Bros, Ltd.
Smith, Jno. H.
Tunbridge & W.

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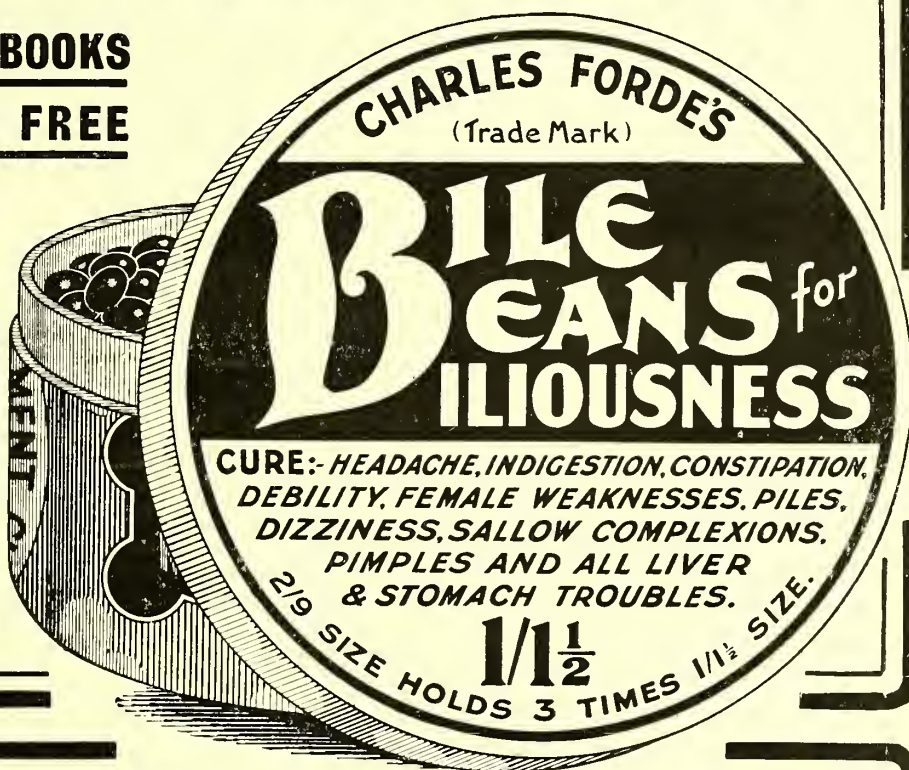
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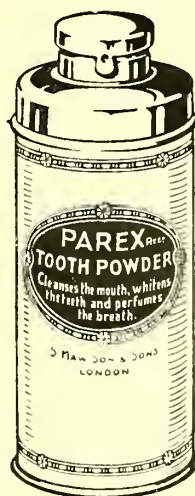
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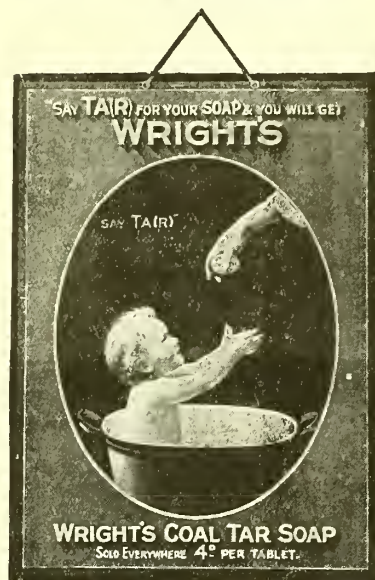


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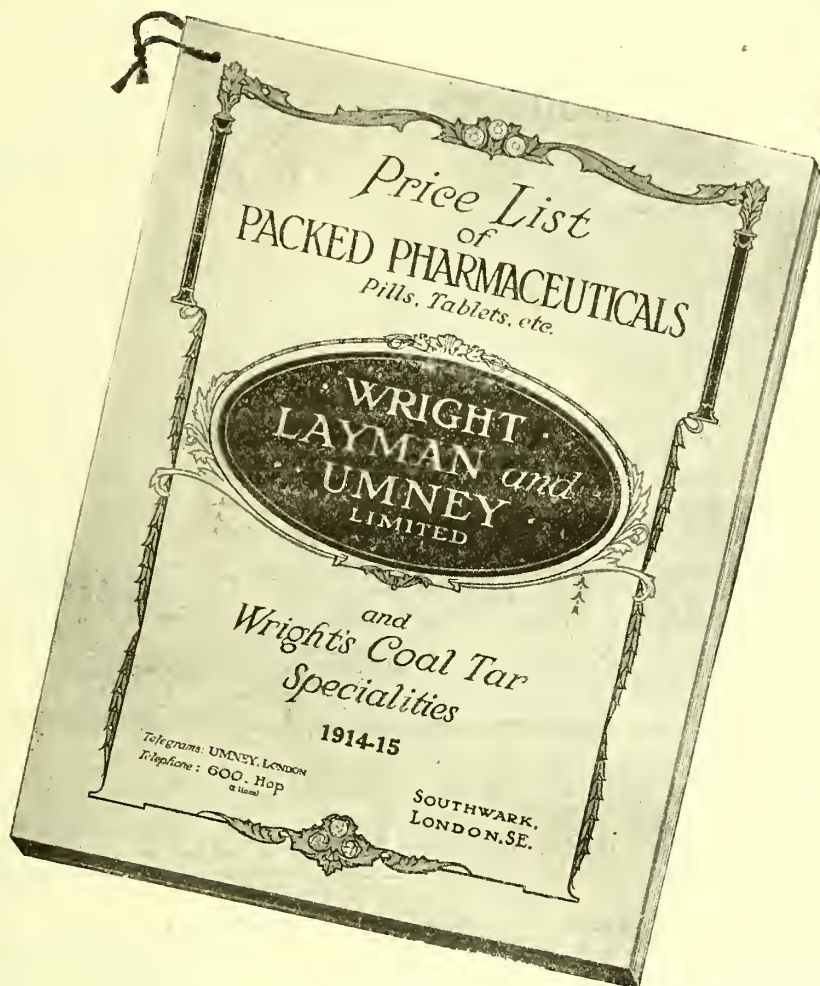
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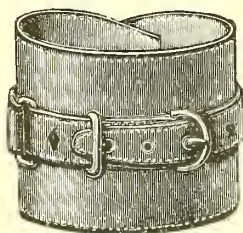
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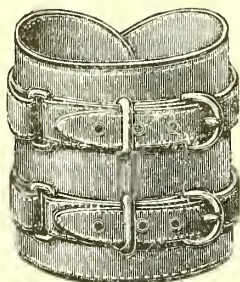
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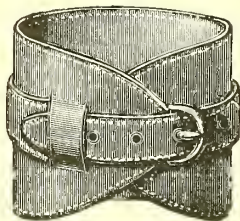
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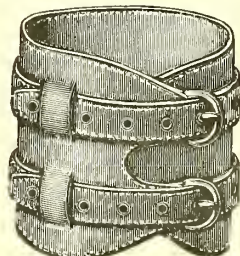
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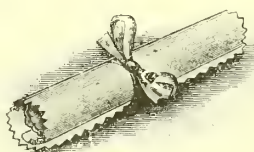
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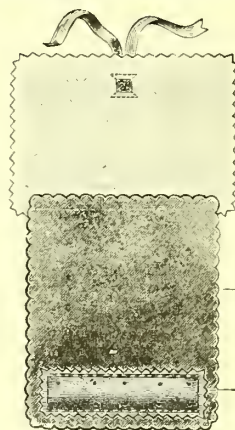
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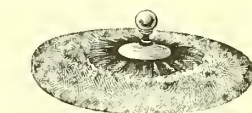
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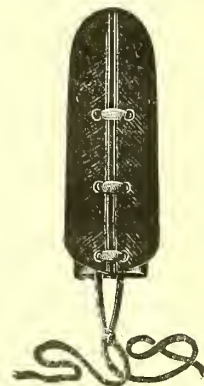


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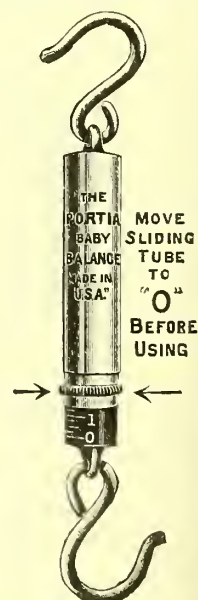


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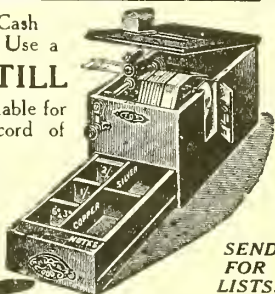
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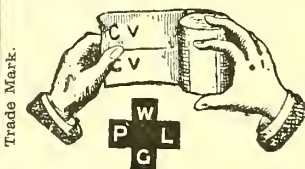


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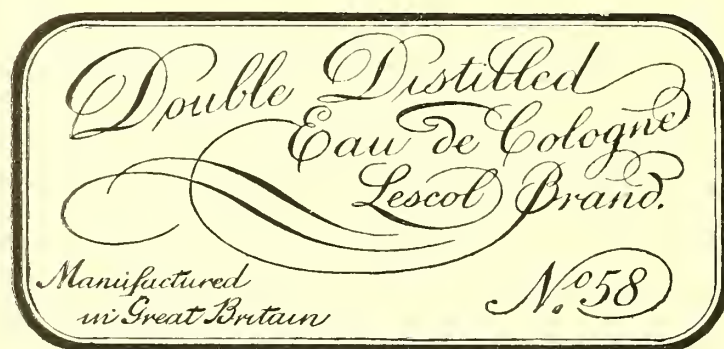
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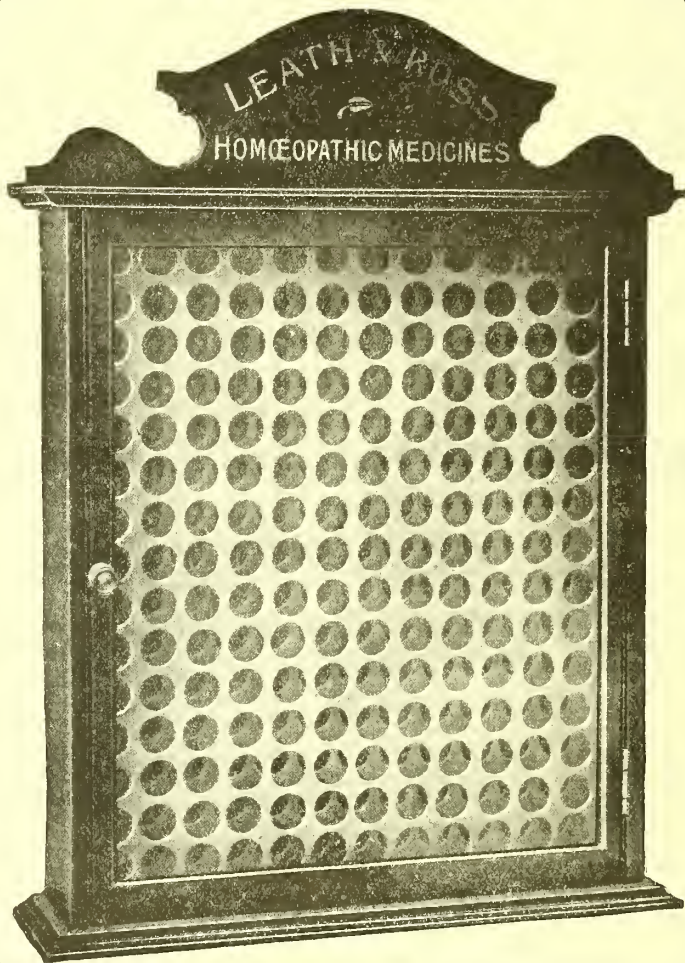
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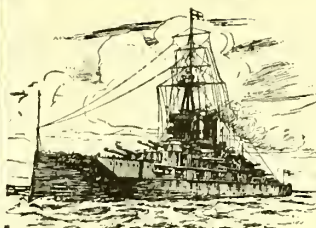
and
Modern Improvements.

H. MILLS, the Chemists' practical Shop Fitter, Shop Front Builder with the latest designs and largest experience. Plans submitted for structural Alterations. Estimates free.

Steam Works:

163-5 OLD STREET, LONDON, E.C.

On hand—a large stock of Drug Fittings, Counters, Dispensing Screens, Wall Cases, etc., equal to new.—Bargains!



The Coast is Clear!
Capture German Trade NOW.
I can help you.
HOW?

By planning Campaigns, writing Booklets, and other follow-up matter. Also Press Ads. in my "Something Different" manner.

MAIL ORDER BUSINESS MY SPECIALITY.

Write to-day for free booklet -:- Correspondence invited.

F. A. DEGEN, F.I.S.A.C. (The Chemist & Druggist Ad Specialist),
c/o The Chemist & Druggist, 42 CANNON ST., LONDON, E.C.

SHOP FITTINGS, SHOW CASES, SIGNS,

&c. &c.

Of Best Quality, Excellent Style,
High-class Finish, at Lowest Prices.

SHOPS MODERNISED. ESTIMATES FREE.
Competent Fitters sent to all parts.

AYRTON-GRAHAM, Ltd., 106 DUKE STREET,
LIVERPOOL

Notice to Chemists.

Keep This Before You.

GEORGE COOK,

THE CHEMISTS' WORKING SHOPFITTER,
Catherine Street, City Road, Old Street,
London.

Cheapest Manufacturer of Silent Salesman Showcases and Chemists' Fittings of every description.
30 years fitting Pharmacies.

Estimates and Rough Sketches free.

You can't do better!

WARD & GOLDSTONE

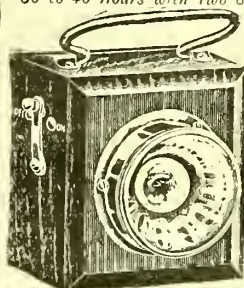
Box 14, Sampson Works,
SALFORD, MANCHESTER.

TELEPHONE: 7083-4-5-6 CENTRAL.
GRAMS: "MULTUM MANCHESTER."

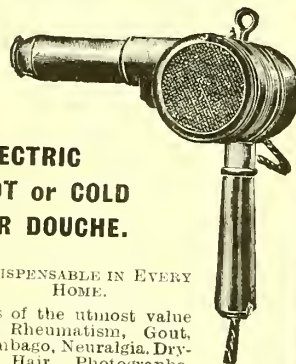
Our "N" Catalogue of Electrical Novelties
Post Free on Application.

30 to 40 Hours with Two Standard Pocket Lamp Refills.

THE "MULTIFIL" HAND LAMP. Patent. British made. This hand lamp is made on an entirely new principle and the results obtained are remarkably successful. It is arranged to take two ordinary pocket lamp refills, and by an ingenious arrangement of the switch 30 to 40 hours light is obtained. Under ordinary circumstances the two refills would only give about 10 hours light so the great economy is obvious. Oak polished case, with two "Volex" Refills and metal filament bulb. Price 4/- net.



"Volex" Refills and metal filament bulb. Price 4/- net.



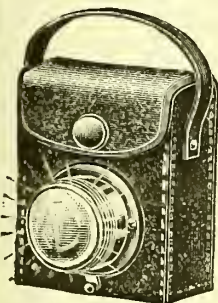
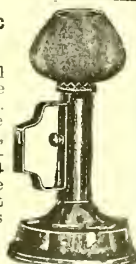
**ELECTRIC
HOT or COLD
AIR DOUCHE.**

INDISPENSABLE IN EVERY HOME.

It is of the utmost value for Rheumatism, Gout, Lumbago, Neuralgia, Drying Hair, Photographs.
Price 29/4 each net.

THE "BELLA" ELECTRIC HOUSEHOLD LAMP.
(BRITISH MADE).

A very effective, useful and strongly made lamp for domestic use. Provided complete with opal glass shade, battery and metal filament bulb. Price 2/4 each net. Takes the Standard size pocket lamp battery which is concealed in the base. Height over all 7 1/2 in.



THE "RELiance" HAND LAMP (BRITISH MADE). Substantially made leather case with prismatic nickel-plated reflector fitted with switch, metal filament bulb and "Volex" Traveller Dry Battery (which gives equal to about 25 hours light). Price 5/8 each net.



TUNGSTEN METAL FILAMENT BULBS. (BRITISH MADE). Free from infringing and supplied with indemnity guarantee. Price: clear, 3/6 doz. net; opal reflector 3/10 doz. net.

The "VOLEX" POCKET REFILL.
British Made.

As recently supplied in large quantities to H.M. War Office. Possesses a most remarkable current capacity. Highly recommended for Home and Export. Price 5/9 doz.





SALASPIN[®]

(TRADE MARK)

The recognised British product which
in every case replaces the German
brands of Acetyl - Salicylic Acid.

Smart Packages.

Showcards.

"Salesmanship" Outers. Free Samples.

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Bottles of 25's (each in Carton) - 4/- per doz. Net.
(P.A.T.A. Minimum for Retail 9d. each)

Bottles of 100's (each in Carton) - 12/6 per doz. Net.
(P.A.T.A. Minimum for Retail 2/6 each)

THOMAS KERFOOT & CO.,
BARDSLEY VALE, LANCASHIRE,
& Bardsley House, London, England.
ESTABLISHED 1767.

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THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, JANUARY 30, 1915.

TO ADVERTISERS IN THIS SUPPLEMENT.

The Publisher desires to make it clear that advertisements of Businesses for Disposal and Wanted, Situations Open and Wanted, Exchange Column, &c., **MUST BE PREPAID** (except in the case of serial advertisers), and to ensure prompt insertion **REMITTANCES MUST ACCOMPANY INSTRUCTIONS.**

Advertisements for the current issue cannot be received after 4 p.m. on Thursday in each week. If it is necessary to telephone or telegraph an urgent announcement this may be done.

PROVIDED the MONEY is TELEGRAPHED

at the same time and the fact made clear that the money order is to be delivered at 42 CANNON STREET, LONDON, E.C. Advertisers will assist greatly in the preparation and quick despatch of the Supplement by making careful note of these rules. Telephone: No. 3617 Central (3 lines). Telegraphic Address: "Chemicus Cannon London." (Three words counted as two.)

BEST RESULTS EVERY WEEK!

← That is what advertisers in The Chemist and Druggist Supplement secure. Not indefinite returns from spasmodic and inflated circulation, but regular, steady success—the best possible in the Drug Trade. It gives

THE PUBLICITY IT PAYS TO PAY FOR.

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

Telephone Number: City 2283.

May be consulted at their Offices on matters of **SALE, PURCHASE, and VALUATION.**

1.—LONDON, S.E.—Situate in good position in main thoroughfare; well-established Business; increasing income; returns £1,860; well-appointed shop; reasonable price only required.

2.—LONDON, S.W. (Within Easy Distance of Town).—Family Retail and Dispensing Business; returning about £1,200 per annum at good prices; the shop is situate in a main thoroughfare in a nice locality; stock and fixtures about £650; price £800.

3.—LONDON, N.E.—Established Business; has been neglected; present returns about £850; excellent profits; comfortable residence; price £375.

4.—CENTRAL SITUATION, Near Holborn.—Lock-up Pharmacy; returns between £825 and £850; easily extended; net profit about £250; attractive, well-fitted shop; valuation of stock and fixtures only required.

5.—LONDON, S.E. (Busy Main Thoroughfare).—Ready-money Business; returns between £950 and £1,000; double-fronted shop, nicely fitted and fully stocked; premises held on lease; pushing qualified man with about £450 will find this a good investment.

6.—SYDENHAM (Residential Locality).—Middle-class Retail and Dispensing Business; returns about £940; very good profits; shop well fitted and good stock; all open to inspection; convenient house; held on lease; very moderate terms offered to an immediate purchaser.

7.—LONDON, S.E. (Main Thoroughfare).—Middle-class Retail trade, including Dentistry and Optics; conducted under manager; returns £700; well-fitted shop, fairly stocked; price £275; part payment entertained.

8.—SOUTH COAST.—Well-established Business; returns about £2,000 yearly; business suited to an energetic man who will do a pushing trade; terms, valuation of stock and fixtures and nominal sum for goodwill.

9.—SURREY.—Unopposed Business, Retail and Dispensing, with small appointment attached; returns £620; net profit £241; double-fronted, well-fitted shop; convenient house, private entrance, small garden; price £430, less than the value of stock and fixtures.

10.—GREAT WESTERN MAIN LINE.—Retail and Dispensing Business of good class, including Mineral Water Manufactory on the premises; the returns amount to about £1,000 yearly, producing a net profit of £500; valuation terms entertained.

11.—EASTERN COUNTY.—Mixed country Retail and Agricultural trade; returns average about £900 per annum; double-fronted shop, with residence attached; vendor's own property; terms, valuation of stock and fixtures; part may remain.

12.—LANCS.—Retail and Optical; situate in manufacturing town, main thoroughfare; returns £1,370; net profit £580; terms, valuation of stock and fixtures and sum for goodwill to be arranged.

13.—INLAND FASHIONABLE WATERING-PLACE.—Good-class Retail and Dispensing Business; situate in one of the principal streets; returns £950, increasing; the shop is well fitted and thoroughly stocked; commodious residence; about the value of stock and fixtures only required.

14.—ESSEX (30 miles from London).—Retail and Dispensing Business; situate in a pleasant locality much frequented by visitors; returns (present rate) £800 under management; modern shop and good house; price to be arranged equitably.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a Periodical Statement of Account, by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties, and will make Special Terms for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.

BRETT & CO.

Licensed Valuers,

73 LAUREL ROAD, LEICESTER.

Telegrams, "Brett Leicester."

Telephone 1934.

F. J. BRETT, M.P.S.,

GIVES PERSONAL ATTENTION TO ALL VALUATIONS.
NO CHARGE TO BUYERS.

AGENCY.—We have always a large number of *Buyers* on our books, and we can frequently find a purchaser at once. We also have a *Private Register* for vendors who are in no hurry to sell, and who do not wish their businesses to be advertised.

STOCKTAKING SPECIALISTS to the Entire DRUG TRADE.

£950 returns.—MIDLAND WATERING-PLACE.—Light-class Retail and Dispensing; small amount of Photo and Optics, for which there is great scope; family reasons cause of sale; price £730, or £50 goodwill and valuation of stock and fixtures.

£500 returns.—KENT.—Very profitable Retail, with plenty of scope; good house attached; price £250; part can remain.

£1,900 returns.—Dispensing, Photo, and General Retail in fashionable South Coast resort; good living accommodation; price £1,000, or goodwill £100 and valuation.

£1,600 returns.—LINCOLNSHIRE.—Good easily-worked Retail; returns increasing steadily; good warehouse, etc.; price £900.

£600 returns (increasing).—MIDLANDS.—Can easily do £1,000; Light Country Retail, with unlimited scope for Agricultural; large house, gardens, etc.; rent £55, Dentist pays half; price £500.

£500 returns.—YORKSHIRE.—Old-established; under unequalled; qualified could double returns at once.

We have cash Buyers for businesses from
£500 to £5,000.

Valuations conducted upon the shortest notice
at moderate fees.

PARSON C. BAKER

1 MOUNTFIELD ROAD, CHURCH END, FINCHLEY, N.

Tel. No. Finchley 811.

Recommended by—

BRITISH DRUG HOUSES, LTD.
MEGGESON & CO., LTD.
BARCLAY & SON, LTD.

All correspondence should be addressed as above.

And at 174 VICTORIA ST., S.W. Tel. No. Victoria 27.
IN Principal Street, Lancashire Town.—Business doing £10 to £15 weekly; unqualified owner; full Wine Licence; good house and shop; rent only £28; price £250, or offer; can be rapidly increased; undeniable opportunity.

WALES.—Cash Business; over £1,100; no opposition; net profit over £300; double-fronted shop, fully stocked; rent £52; valuation and small goodwill; trustees will consider any reasonable offer.

SMALL up-to-date Business, regularly increasing, in S.W. district; profitable without any side-lines; first reasonable offer.

CHELTEMHAM.—Old-established Business; neglected from age and infirmity of proprietor; present returns over £900; corner shop, central position; 7 rooms, kitchen and offices, side entrance, warehouses; rent £60; must sell immediately; large reduction from value of stock and fixtures; younger, modern method, will double return at once; first reasonable offer accepted; only small capital necessary.

THOS. TOMLINSON & SON

CHEMISTS' VALUERS, TRANSFER AGENTS,
AND EXPERT STOCKTAKERS,

45a MARKET STREET, MANCHESTER.

ESTABLISHED OVER HALF A CENTURY.

Telegraphic Address: "Tomtom."

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

MESSRS. BERDOE & FISH

Chemists' Valuers and Transfer Agents,

35 JEWRY STREET, FENCHURCH STREET, CITY.

TELEPHONE: 1809 CENTRAL.

Have the following businesses for Disposal. (No charge to Purchasers.)

1.—MIDLANDS (Health Resort).—Light Family Retail and Dispensing Business; increasing; returns £950; net profit £33; good position; excellent house and pharmacy; price about £700.

2.—CORNWALL (Death Vacancy).—Old-established Light Family Retail and Dispensing Business; returns between £1,000 and £1,100; double-fronted shop, in good position; same hands over 20 years; low price accepted for early sale.

3.—DEVON COAST.—Good-class Retail and Dispensing Business, increasing; returns nearly £800; good profits; large shop, modern fittings and good stock; price £500, little more than valuation.

4.—ESSEX (Popular Health Resort).—High-class Family Retail and Dispensing in growing district; returns average £16 weekly; good profits; plenty of scope; modern house and pharmacy; every convenience; price £625, or close offer.

5.—KENT COAST.—Light Family Retail and Dispensing Business, in central position; established many years; returns average £750, last year £520; good premises, fully stocked; price £300 cash; strongly recommended.

6.—SURREY (Charming Locality).—Light Country Retail Business, returning over £400; net profit £160; large house and garden; net rent only £15, on lease; stock and fixtures worth £200; price £175, or first reasonable offer.

7.—LONDON, N.W.—Sound middle-class Cash Retail Business; in good position; returns over £1,500; net profit nearly £500; books open to fullest investigation; own property; price £800.

8.—LONDON, S.E.—Sound middle-class Cash Business, in main road; returns last year £970; net profit £350; books well kept; nice house and garden; well-stocked shop; price £450 cash; strongly recommended.

9.—BUCKS.—Good Light Retail, Dispensing, and Prescribing Business, in pleasant market town; returns nearly £1,300; net profit £350; assistant kept; large house and garden; price £800.

10.—EASTERN COUNTY (Market Town).—Family Retail and Agricultural Business; illness sole cause of selling; returns about £1,200; has done £1,700; central position; price, valuation, about £500, or offer.

11.—LANCS.—Cash Retail, Prescribing, with N.H.I.; returns over £900; net profit over £300; good main road position; low rent; convenient house; stock and fixtures worth £475; price only £550.

12.—DERBYSHIRE.—Unopposed Light Village Retail Business; returning £550; net profit £195; books properly kept; good house and shop; low rent; price £250, about valuation.

13.—CHESHIRE.—Good-class Dispensing and Light Retail; over 3,500 private scripts yearly; returns £1,000; net profit £300; Assistant kept; good residential locality; nice house; price £750.

14.—LONDON (Essex Suburb).—Good ready-money Retail Business, under management; present returns about £1,000, besides £500 a year from N.H.I.; modern-fitted shop, excellent position; plenty of scope; price £600 cash.

15.—LONDON (South).—Well-established ready-money Retail Business, in busy main thoroughfare; returns approach £2,000; good profits; low rent; convenient premises; well stocked; price £950 cash.

16.—LONDON, N.W. (Death Vacancy).—Good-class Family Retail and Dispensing Business; present returns £10 to £12 weekly; very profitable; can easily be made do £20 a week; fine shop, well stocked; price £275, or valuation.

STOCKTAKING VALUATIONS.

We, as the originators of stocktaking valuations, have for many years past continued to point out to chemists the importance of an annual stocktaking; and this year, more than ever, every Chemist in business should take stock. We as experts undertake this work at a very low fee, and without in any way upsetting the ordinary routine of your business.

Please read page 64 in "C. & D. Diary," and write for pamphlet and terms.]

BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words, or less; 6d. for every 10 words or less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

Price-lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

ABERFAN and Nelson and Llancainach, South Wales.—For Sale as a going concern, old-established first-class Retail and Dispensing Chemist and Druggist Business; last year's returns at Aberfan £1,165, Nelson and Llancainach £554; N.H.I. Dispensing; only shops in villages. For permission to inspect apply Mr. H. Riley, 22 Park Row, Leeds, Incorporated Accountant, to whom offers can be made.

BOLTON, Lancashire.—Small sound Business, established 24 years, to be given away; fixtures and stock on sale; stock can be reduced; shop to let at low rent; splendid opportunity for a Pharmacist. Apply to T. Stevenson, 49 St. Helens Road, Bolton, Lancashire.

CHELTHAM.—Parson C. Baker, 1 Mountfield Road, Church End, Finchley, N., is instructed to sell immediately, at much less than value of stock and fixtures, the Business of Mr. Llewelyn, in Wincombe Street, Cheltenham, corner of Albion Street, a central position; on account of age and increasing infirmity business has been neglected; present returns from Cash Retail are over £800, and N.H.I. about £120; good house; rent £60; small capital only necessary; first reasonable offer accepted; younger man, modern methods, can double return at once.

EDINBURGH.—High-class old-established Pharmacy for Sale; main thoroughfare; modern fittings, electric light, etc.; valuable specialties and agencies included; good reasons for disposal. Apply, 246/54, Office of this Paper.

KENT (Death Vacancy).—Family and Dispensing Business; established and in same hands 40 years; stock, fixtures, etc.; first reasonable offer. Apply, M. A. Cox, Greenhithe, Kent.

KENT (10 miles from London Bridge).—Well-established, progressive Business, showing for the last four years an average 50 per cent. gross profit; to be had at price of stock and fittings (about £600); good prices and mostly cash; present proprietor, owing to domestic trouble, desires to leave the neighbourhood. "Urgent" (200/30), Office of this Paper.

LANCS (Popular Resort).—Sound Business; splendid position, best locality; handsomely fitted, well stocked; turnover £680; exceptional profits; valuation £390; low rent; splendid opening for Optics; no reasonable offer refused. Apply, 202/37, Office of this Paper.

LEEDS.—Good-class suburban Business; fine position; good house and garden; returns three years average £1,350; price, valuation. 198/7, Office of this Paper.

LONDON, E.—Retail and Prescribing in thickly populated district; splendidly fitted; electric light; nice shop and house; lease; low rent; open to reasonable offer for immediate purchase. Apply to 198/30, Office of this Paper.

LONDON, S.W.—Advertiser, wishing to devote full time at his West-End business, offers Suburban one for immediate Disposal; valuation of stock and fixtures £700; electric light; long lease; comfortable house; old-established, with several valuable Proprietaries; insured against all war risk, £1,000. Interview arranged after application to "Celeritas" (246/56), Office of this Paper.

MIDDLESEX (About 9 Miles' Out).—Main Road, old-established Light Retail and Dispensing Business; splendidly fitted; returns about £700; lease; rent £45; convenient and roomy house with side entrance; price all at £475; bona-fide inquiries only answered; satisfactory reasons for sale. Apply, "Lavender" (246/59), Office of this Paper.

MIDLANDS.—Good medium-class Business in good position in healthy town of 50,000; very few Patents; chiefly Prescribing and Dispensing, with first-class own Proprietaries; price, valuation only; selling for reasons of health; every investigation allowed to bona-fide inquirers. 196/8, Office of this Paper.

MONMOUTHSHIRE.—£50 down and balance at purchaser's convenience; Mixed Cash Business; doing well over £1,000 per annum; also large N.H.I. connection; ill-health the sole reason for disposal. 185/27, Office of this Paper.

NEAR Manchester.—Sound Business, situated in largely populated area, without near opposition; Wine Licence; N.H.I. Dispensing; easy rental; steady trade; good profits; purchase price £400. Apply to "Reliable" (199/32), Office of this Paper.

NEAR Manchester.—Old-established Light Retail Business in thickly populated district; Wine Licence attached, showing net profit of £200; could be increased; price £250 cash. Apply, 199/31, Office of this Paper.

NORTH-WALES.—Unopposed Light Country Retail, in charming locality; easily worked; returns £700; net profit £200; handsome shop, well fitted and stocked; good reason for disposal; price for quick sale £250. 199/19, Office of this Paper.

AS a going concern, old-established Light Retail and Dispensing Business, of repute; stock fixtures, goodwill, and proprietaries, situated in main thoroughfare of fashionable suburb of London, the centre of rapidly growing neighbourhood; price moderate, at valuation, in same hands 34 years. Apply, to "Statim" (195/3), Office of this Paper.

CHEMIST'S Business for Sale, full Wine and other Licences, at Lees, near Oldham; price £250 for immediate sale; cost nearly double; takings could be improved by qualified Chemist; payment of purchase money by instalments if desired. Apply, Barstow & Midgley, 8 Harrison Road, Halifax.

FOR immediate Disposal, Druggist, Confectionery, and Grocery Business in the Barnard Castle district, County Durham; stock at cost, about £140; fixtures and fittings at a valuation. Full particulars from William Harland & Son, Chartered Accountants, Stockton-on-Tees.

FOR immediate Sale.—No agents need apply.—Vendor, having two sound Businesses, is unable to give proper attention to both; he has had to rely on indifferent management for the business now offered; charming coast resort, N.W.; entirely unopposed; own prices; exceedingly profitable; turnover round £900, and increasing; net profit, last year £310; shop well fitted and stocked; good house adjoining; vendor's own property; will grant lease if required; this is an opportunity seldom met with; only those meaning business and with £500 at command entertained. Particulars and letter of introduction from Jno. Thompson, Ltd., 58 Hanover Street, Liverpool.

FOR Sale, good-class Dispensing and Light Retail Business, showing clear profit of over £300 per annum; owner would be willing to exchange; domestic bereavement sole cause of sale. 200/12, Office of this Paper.

GENUINE established Chemist's Business in Lancashire for Disposal; well stocked; easily worked; good prices; good profits; best position; 17 years' lease to run; satisfactory reason for disposing; fullest investigation invited; books kept; takings for 1914 £1,025; cash offers wanted. 198/4, Office of this Paper.

GOLDEN opportunity for those wishing a good sound Business; in the Midlands; turnover £680; net profit £200; note the terms—£125 down, balance by easy instalments to suit purchaser; scarcely any opposition; very progressive industrial district and scope for further developments. For further particulars write 197/39, Office of this Paper.

SMALL Drug Business for immediate Sale owing to death; old-established; easy terms; suit qualified man. Apply, J. H. Turner, Solicitor, York.

WRITE me for full particulars my unopposed paying little concern, for Sale to genuine cash buyers; coming district; takings could be doubled in near future; healthy spot, within easy reach to beautiful country; there is not a more genuine concern for sale. "Panel" (201/1), Office of this Paper.

£130 will purchase a good-class Dispensing and Photographic Business in a Western Suburb. Replies to "Bismuth" (246/24), Office of this Paper.

£150 part can remain; Streatham, S.W.; compact, well fitted shop; doing £9 average and increasing; comfortable seven-roomed house; stables in rear, let off £7 10s.; leaving net rent £32 10s. and rates; big scope for N.H.I. Dispensing; no near opposition and no severe cutting; stock and fittings worth the money. Apply, C. Chapman, 37 Wimbledon Road, Lower Tooting, S.W.

DISSOLUTION of PARTNERSHIP

RE W. H. McMULLAN & CO.—The Partnership as Pharmaceutical Chemists in Larnie in the above firm hitherto existing between John Pringle Parke and William H. McMullan has been dissolved by mutual consent through expiration of the existing agreement. William H. McMullan, having purchased out the entire interest in the above business of John Pringle Parke, is now the Sole Proprietor, and will carry on the aforesaid business as usual at the present address and under the present name.

JOHN PRINGLE PARKE
WILLIAM H. McMULLAN

December 30th 1914.

FOR SALE.

EXCEPTIONAL opportunity for opening a new business; complete Stock and superior Mahogany Fittings, in first-class order, for early Disposal, York Bottles, illuminated Mortar and Sign, Mirror and Plate-glass Window Enclosure, Photographic and Optical Goods and Test-case; specification and photograph on application; inquiries only from genuine buyers wanted. 197/20, Office of this Paper.

IN good order; National Cash Register, second-hand; cheap; tape-printer. Write, "T. C.," 29 Beaconsfield Road, S. Tottenham, N.

TO LET.

CHEMIST'S Shop, Willesden, to Let; £45 per annum; just vacant; cause unforeseen; can do £20 weekly. To view only apply, 11 Guilsborough Road, Church Road, Willesden (close to shop).

BUSINESSES WANTED.

BUSINESS wanted at once; not particular as to kind (or district where I could open, good bonus arranged); cash ready; confidence. "Pharmacist," Ambleside, Reddings Lane, Hall Green, Birmingham.

WANTED, a Business, London or Suburbs; returns from £800 to £1,500. Full particulars to "Uphill" (201/25), Office of this Paper.

BOARD AND RESIDENCE.

COMFORTABLE Bedroom with use of bathroom; part board if required. 37 Lavender Gardens, Clapham Common, S.W. (five minutes Clapham Junction Station).

AGENCIES.

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QUALIFIED Chemist, Spaniard, writing English and French, with London and Paris Pharmacy experience, residing Madrid, calling already for one Proprietary Medicine on Doctors and Chemists in Spain, is open to Represent another Pharmaceutical firm in Spain; London references. 235/47, Office of this Paper.

SPECIALITIES, Drugs, Oils, and Drysaltery. — Advertiser is desirous of corresponding with a gentleman *re* Travelling; one having sound connection and moderate capital, who would consider an arrangement or Partnership with established firm, view mutual trading, economy, and extension. Apply, with particulars, to 201/34, Office of this Paper.

PARTNERSHIPS.

LONDON, W.—Wanted, an experienced, fully qualified Chemist to Manage first-class Retail establishment and join Board of Directors in Limited Company; exceptional opportunity to right man; preference given to one who would invest a little capital, with option of succession if desired. Salary required and all particulars to 197/22, Office of this Paper.

MANAGER-PARTNER. — Owing to death of proprietor, a Manager-Partner is required for an old-established, well-paying Chemist's business, situated in centre of large town in South Wales; Manager must be able to invest money in the business; good opening for young man; principals only dealt with. Apply, 200/10, Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words or less beyond, prepaid.

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RESULTS OF ADVERTISING IN THIS SUPPLEMENT LAST WEEK JAN. 23 1915	
NATURE OF ADVT.	REPLIES
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This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of Advertisers who use a number or nom de plume.

RETAIL.

ABERDEEN.—Qualified Assistant required; also Junior. Apply, with full particulars of experience, age, height, salary, when disengaged, Hunter, Chemist, 111 Union Street.

BIRMINGHAM District.—Wanted immediately, young qualified Chemist or qualified lady Chemist; quick and accurate Dispenser. Wire or write terms, Shelley's, Bilston.

BRIGHTON.—Gentlemanly Assistant (indoors), unqualified, for first-class Dispensing and Retail; no N.H.I. State age, height, experience, references, and salary required to T. Read, 4 Victoria Terrace, Kingsway, Hove.

BRISTOL.—Young qualified Assistant wanted; Dispensing (good class); easy position; comfortable home; very little N.H.I. work. References and salary asked to Edward Maish, Cotham Brow, Bristol.

CALNE, Wilts.—Junior Assistant wanted at once; easy hours; must be able to Dispense. State salary required (outdoors) and give references to F. Strawson, 12 Rose Hill, Dorking, Surrey.

CARDIFF.—Unqualified Assistant wanted as Second Hand; outdoors; willing, industrious man; good Dispenser, Stock-keeper, and Counter hand; age about 40, or otherwise ineligible to serve his country. State wages required and whether married or single, send copies of references and photo (which will be returned), 197/34, Office of this Paper.

CHELMSFORD.—A young unqualified Junior Assistant wanted for good-class country business; outdoors; two other Assistants kept; no Sunday duty. Please give full particulars and salary required, with references, E. Bunn, Chemist, The Central Pharmacy, Chelmsford.

COUNTY ASYLUM, Berry Wood, Northampton.—Qualified Dispenser, with knowledge of Photography, required during the war. Apply, stating age, reference, and salary required, to Medical Superintendent, Berry Wood, Northampton.

DONCASTER.—An unqualified Junior Assistant required for good-class business; outdoors. Apply to Walter E. Plant, Pharmaceutical Chemist, 28 High Street, Doncaster.

Doncaster.—M. H. Stiles & Son have a vacancy for an Improver or Junior; one used to N.H.I. Dispensing preferred. Apply as above, stating full particulars, age, height, and salary required (outdoors); enclose photo.

Eastbourne.—Outdoor Junior wanted; reliable Dispenser and Salesman; good salary and hours to suitable man; no Sunday duty. Apply, stating usual particulars and salary required, to Geo. A. Harner, Pharmacist, 47 and 49 South Street, Eastbourne.

Leeds.—Assistant wanted at once; outdoors; must be a good Dispenser, used to a good-class business, and competent to take charge; salary £2 2s. per week. Apply, M. E. Murray, 221 Woodhouse Lane, Leeds.

Liscard, Cheshire.—Junior Assistant, with good Dispensing and General experience, with knowledge of Photographic business; unqualified. Please state age, experience, salary required (outdoors), and when disengaged, L. E. Thomas, Pharmacist, Wallasey Road, Liscard, Cheshire.

Liverpool.—Assistant, experienced, for Retail and Dispensing business; active and obliging; qualification not necessary; preference given to married man who would be willing to reside on the premises; applicants please state age, height, salary required, and where experience has been gained. Apply, "Petrol," Messrs. Henry Jackson & Sons, School Lane, Liverpool.

Liverpool.—Elderly registered Chemist for supervision; early hours; light duties; good salary. Full particulars, stating if disengaged, "X," Evans Sons Lescher & Webb, Hanover Street, Liverpool.

London.—Young qualified Assistant required immediately for business in the City; must be good Dispenser. State age and salary required, 197/300, Office of this Paper.

London (8 miles out).—Junior wanted; indoors; Part-time could be arranged to suit Student. State age, height, experience, and when disengaged, 203/11, Office of this Paper.

London, N.—Part-time Assistant wanted for N.H.I. Dispensing and Counter; two or three days weekly. Apply, Walker, Chemist, 78 East Road, City Road, N.

London, N.—Junior for quick Retail and Dispensing; one whole day's holiday per week. References, photo, and usual particulars to "Ypres" (200/31), Office of this Paper.

London, N.E.—Junior Assistant for suburban branch; outdoors. State age, height, experience, and salary expected, enclosing photo if possible, to Matthews & Son, Pharmacists, 722 High Road, Leytonstone, N.E.

London, N.W.—Qualified Assistant wanted for Dispensing business; outdoors. Apply, P. Davidson, Pharmaceutical Chemist, 342 High Road, Brondesbury.

London, S.W.—Junior wanted at once for good-class Dispensing and Retail business; outdoors or indoors. Apply, stating all usual particulars, to Feltwell & Son, Chemists, Barnes, London, S.W.

London, S.W.—Junior Assistant, about 21, outdoors, by February 22, for Counter, Stock, and Dispensing. Apply, with full particulars, stating salary required, to A. T. Gray, 5 High Street, Barnes.

London, S.W.—Junior (outdoors) for up-to-date Pharmacy; Stock, Dispensing, and some Counter; every encouragement to smart man. "Phone 446 Streatham," or write to C. Breese, 75 Mitcham Lane, Streatham, S.W.

London, S.W.—Assistant wanted; qualified preferred; will entertain unqualified if experienced; indoors. State usual particulars in first instance, or call, Tupholme & Son, 1 Colcherne Terrace, Earl's Court, S.W.

London, W.—Outdoors; unqualified Assistant for good working-class district; must be accustomed to N.H.I. Dispensing; hours 8.30 to 9.30 p.m., 10.50 p.m. Saturdays; whole-day holiday Wednesday; duty every third Sunday; Extractor preferred. Barton, 74 Stratford Road, South Acton, London, W. Tel. 966 Chiswick.

London, W.—Competent Assistant with Dispensing experience and generally well up in the business; outdoors; no Sunday duty. Bruces, Ltd., 228 High Road, Chiswick, W.

London, W.C.—Assistant at once; must be smart Salesman and of good address and appearance; good salary and commission; knowledge of French preferred. Apply in first instance to Wardour Pharmacy, 155 Wardour Street.

London (near).—Qualified Assistant (indoors) wanted immediately; capable of taking charge. Please give references and state salary required, J. E. Hyde, 10 Queen Anne's Place, Enfield.

Maidstone.—Unqualified Assistant wanted for good-class Dispensing and Family business; indoors or outdoors; four apt. Apply, with age, height, salary required, and fullest particulars, to Corfe & Son, Chemists, Maidstone.

Manchester.—Improver and Part-time Assistant. Apply, Jeans, 151 Oxford Road, Manchester.

Manchester.—Wanted, qualified Assistant to Manage a good Retail Dispensing business; good Counterman. State age, salary, reference, etc., 200/19, Office of this Paper.

Manchester District.—Qualified Assistant wanted; salary £3 per week and commission; must be quick and reliable and a good Salesman. State age, height, experience, references, and photo, 198/3, Office of this Paper.

St. Helens, Lanc.—Assistant wanted, about 24; must be a good Dispenser and Counterman; good references; no Sundays; half-holiday weekly. J. Glover, Photo Chemist, 14 Ormskirk Street, St. Helens.

Sheffield.—Qualified (Minor) Dispenser (lady or gentleman) and unqualified Junior wanted at once; outdoors; knowledge of Photography a recommendation; cash business. Apply, letter only, giving full particulars of experience, age, height, salary required, and enclose photo, to H. G. Williams, 118 The Moor.

South Staffs.—Wanted immediately, qualified Assistant, middle-aged, for Light Retail and N.H.I. work; permanency to suitable man; Extractor preferred. Fereday, Cheslyn Hay, Walsall.

Stockport.—Unqualified Assistant, age 20 to 25, required in good-class Family business; comfortable berth. Apply, with usual particulars, and enclose photo if possible (to be returned), 200/35, Office of this Paper.

Tyneside District.—Unqualified Assistant; knowledge of Photography preferred. State age, experience, and salary required, P.O. Box 141, Leeds.

Weybridge.—A competent Assistant (outdoors) for high-class Dispensing business. State age, height, experience, references, salary required, etc., also enclose photo, E. T. Neathercoat, Pharmaceutical Chemist, Weybridge.

Wimbledon, S.W.—About February 1; Assistant for good-class Dispensing and Light Retail business; no N.H.I.; hours 8 to 8; indoors; weekly half-holiday. Apply, stating age, height, and enclose photo if possible, Blanchford, 76 High Street, Wimbledon.

Woking, Surrey.—Outdoor Assistant wanted in good-class Retail and Dispensing business, with Photography; must be reliable Dispenser; salary 35s. weekly. Apply, with full particulars, to Price, Chemist, 2 Guildford Road, Woking, Surrey.

Yorkshire.—Junior required for good business in the West Riding; permanency and progressive salary to a smart young man. 197/31, Office of this Paper.

A Capable Assistant to take charge of Village Drug Store in Co. Durham, as early as possible; also Junior or Improver for quick Retail; good references essential. Send full particulars in first letter, Rowland Hill, Chemist, Spennymoor.

A Thoroughly experienced settled-down Senior Assistant (must be capable of taking sole charge if necessary) for General Retail, Dispensing, and Photographic business (outdoors), soon; state age, usual particulars, references, and salary. Apply, J. Griffith Isaac, Pharmacist, Neath.

A Assistant, qualified, knowledge of Photography, for South Coast Retail Dispensing business; easy hours; Sunday duty alternate. Usual particulars to "W. J. H. L.," 9 Beach Road, Littlehampton.

A Assistant wanted, with energy and ability; not eligible for Military service; permanency and good salary. Apply, Messrs. Timothy White Co., Ltd., Chemists, Portsmouth.

A Assistant (unqualified) wanted early February in good-class Dispensing and Retail business, where three Assistants are kept (duty equally divided), who live over premises under care of housekeeper; hours 8.30 to 9, Saturdays 10. Apply, giving full particulars, age, experience, salary, and enclose photo, Procter, 5 Station Parade, Eastbourne.

A Assistant, 20 to 22, for good-class Light Retail and Dispensing business; easy hours. Send fullest particulars and references, photo if convenient, and state salary required (indoors or out), A. G. Reid, Petersfield, Hants.

A Assistant at once for good-class Dispensing business; one who has had good Dispensing and Counter experience; alternate Sunday duty and half-day weekly. Apply, with usual particulars, to Manson & Rider, 127a St. John's Road, Waterloo, Liverpool.

A Assistant, unqualified, obliging, energetic, for Counter and N.H.I. Dispensing, wanted at once. Apply, with full particulars, to W. H. Harrison, Chemist, 61 Market Street, Hindley, Lancashire.

A Assistant, about 23, wanted at once, with good Dispensing experience; outdoors. Apply, R. C. Harrison, Grayshott, Surrey.

ASSISTANT; unqualified; can arrange time for study. Apply, stating age, experience, references, and salary required (outdoors), to Mr. J. D. Pidgou, Pharmaceutical Chemist, 6 Lewisham High Road, New Cross, S.E.

AT Once.—Qualified Assistant (outdoors) in first-class Retail and Dispensing business, S.W.; age about 25; London experience. Full particulars, salary expected, in first letter, to "Statinim," c/o British Drug Houses, Ltd., 22 Graham Street, City Road, N.

AT Once.—Junior or unqualified Assistants wanted (outdoors) in high-class Retail and Dispensing business, or Locum until suited; no heavy trade. Apply to A. Elliott Sewell, Chemist, Huntingdon.

ATKINS & SON, Pharmacists, Salisbury, require immediately an unqualified Assistant (outdoors) for Counter work mainly; must possess good knowledge of Photography; good references indispensable. State salary required.

CHEMIST and Dentist, doing all Mechanical work on premises, has vacancy for Assistant. Please state full particulars, age, experience, where obtained, ability in Pharmacy and Dentistry, if any, if married what family, class of business used to, salary required, when disengaged, references, photo, Foster, Ivydale, London Road, Portsmouth.

COMPETENT Assistant for working-class business. R. R. Bagshaw, 710 Oldham Road, Newton Heath, Manchester.

DISPENSER; thoroughly capable and obliging; hours 10 a.m. to 10 p.m. (approx.), five days a week; also Dispenser for evenings (7 p.m. to 10 p.m., approx.); four nights weekly, Tuesday, Wednesday, Thursday, Saturday; 15s. weekly. Barnett, 97 Southwark Park Road, Bermondsey.

ELDERLY qualified Chemist required, mainly for N.H.I. Dispensing; comfortable and permanent berth. State salary and when at liberty, 197/301, Office of this Paper.

GIBSON DIXON, Chemist, 8 Old Market, Halifax, has a vacancy for a smart Junior Assistant; must have good address and have had Counter experience. Full particulars in first letter, with photo if possible.

IMMEDIATELY.—An Assistant: 21 to 25 preferred, but not essential; used to Family, Retail, and Dispensing business; outdoors; knowledge of Homoeopathy an advantage. Alban Atkin, 243 West End Lane, West Hampstead.

JUNIOR.—Excellent opening for young man, age about 20-21 would suit one just out of apprenticeship; permanent berth with progressive salary. 197/103, Office of this Paper.

JUNIOR or Improver wanted at once; one just completed apprenticeship would suit. Full particulars, photo first letter, Lester & Williamson, Chemists, Foleshill Road, Coventry.

JUNIOR wanted, active and reliable, for good-class Dispensing and Retail business; indoors. Usual particulars and salary required to Dunkley & Rogers, 55 High Street, Tunbridge Wells.

JUNIOR Assistant wanted for branch; no Sunday duty. Apply, Lands, Chemists, Coalville, Leicester.

JUNIOR Assistant for good-class Family business; outdoors; two kept. Full particulars, age, experience, salary, etc., to Neve, 10 Victoria Parade, Norbury, S.W.

JUNIOR to assist with Stock, Counter, and Dispensing. Full particulars in first letter and when disengaged to W. McBryde, Durbin's Drug Stores, 112 North End, Croydon.

JUNIOR, about 20. All particulars to Dolman, Chemist, Cheltenham.

LABORATORY Assistant required; good prospects. State age, salary expected, experience, etc., Timothy White Co., Ltd., Portsmouth.

LADY Dispenser, qualified, for Surgery, also to keep index cards for Panel patients and some Bookkeeping; outdoors; hours 9-11 a.m. and 5-7 p.m. Write, 193/33, Office of this Paper.

LADY (Minor) Assistant wanted; North of England. State experience, copies only of references, salary required, etc., 201/8, Office of this Paper.

MANAGER required, single, with view to purchase after one month's trial; genuine profitable business in South Wales colliery district; capital required about £700; terms might be arranged. "Succession" (197/24), Office of this Paper.

MESSRS. STONE & SON, Exeter, require an Assistant; unqualified; one with general all-round knowledge.

MESSRS. TIMOTHY WHITE CO., LTD., Chemists, Portsmouth, require a capable Pharmacist as Manager; not eligible for Military service; easy hours; good and progressive salary, with excellent prospects.

PART-TIME.—Wanted, a smart Assistant for evenings from 6 to 10 p.m. (Thursdays free); Saturdays all day, 10 a.m. to 11 p.m.; one accustomed to good-class business and able to dispense essential. For further particulars apply 13 Church Street, Camberwell, S.E.

QUALIFIED Locum wanted immediately for six weeks. Apply, stating salary required and age, to "Strength" (196/1), Office of this Paper.

QUALIFIED Manager for branch in Colliery district; abstainer; permanency. Age, experience, and salary required to D. George, Chemist, Pentre, Glam.

QUALIFIED Assistant, with good Dispensing experience, required; outdoors. Courtenay, 2 Queen's Terrace, St. John's Wood, N.W.

QUALIFIED; elderly man not objected to; light duties; short hours; supervise N.H.I. dispensing; permanency; in- or outdoor. State salary and references, 200/5, Office of this Paper.

REQUIRED at once, a Dispenser by a firm of Surgeons in the North of London. Apply to "Drs.," 124 Stroud Green Road, N.

SAVORY & MOORE, Lancaster Gate, W., require a qualified Dispensing Assistant; outdoors, bedroom on premises. Full particulars, with photo, to the Manager.

SMART Assistant wanted at once; unqualified; indoors; used to good-class Dispensing and Photography. Apply, giving fullest particulars as to salary required, experience, etc., to Cruse & Co., Ltd., 7 The Strand, E. Southsea.

TWO experienced Assistants wanted, well up in Dispensing, Counter work, Photography, and Window-dressing; must be abstainers; hours 8.30 a.m. to 7.45 p.m., Fridays and Saturdays later. "Chelmsford" (199/12), Office of this Paper.

UNQUALIFIED Assistant or Improver; outdoors; South Wales; honest and industrious. Reply, stating age, experience, and salary required, 198/6, Office of this Paper.

UNQUALIFIED Assistant wanted; capable Dispenser and Counterman. Apply, Mr. Hayward, 25 Suffolk Terrace, Bournemouth.

UNQUALIFIED Assistant (outdoors) wanted at once for Dispensing and Light Retail; easy hours. Apply, stating age, height, salary required, and reference, W. Charrington, Pharmacist, Lichfield, Staffs.

UNQUALIFIED Junior or Improver wanted; outdoors; no Sunday duty; hours easy. Apply, giving age, height, salary required, and all usual particulars, to J. & D. G. Rees, Chemists, 9 Fabian Street, Swansea.

WANTED at once, an unqualified male Assistant with knowledge of Dispensing; outdoors; short hours; no Sunday duty; wages 30s. Write, giving age and experience, to "B. K.," c/o Street's, 30 Cornhill, E.C.

WANTED, three or four qualified Dispensers for London Stores; short hours; no Sunday or Bank Holiday work; salary to commence at £2 15s. Apply, stating age and particulars, experience, to 196/7, Office of this Paper.

WANTED, unqualified Junior; indoors; capable Dispenser at Counter hand. Apply, stating references, salary, and full particulars, 198/36, Office of this Paper.

WANTED, Manager for Branch; qualified; married; preference salary £3; short hours. Full particulars to W. Par Williams, Chemist, Bargod, Glam.

WANTED at once, Junior Assistant for old-established confectionery business; outdoors. Apply, with full particulars, Gostling & Co., Chemists, Diss, Norfolk.

WANTED, an Assistant (unqualified) for Retail and Dispensing; outdoors. Full particulars to Clare & Hunt, Southborough.

WANTED at once, Junior Assistant or Improver; please state age, experience, salary required; indoors preferable; no Sunday duty. Apply to John Gower, Chemist, Vaughan Street, Llanelly, South Wales.

WANTED immediately, Junior Assistant; used to Insurance Dispensing preferred. Apply, with full particulars in first letter, to F. W. Goodess, Pharmacist, 25 Market Street, Leicester.

ANTED, two capable, experienced Juniors (outdoors), accustomed to high-class Dispensing and quick Counter, where fixed are kept; hours 8 to 8, Saturdays 10; one Sunday in 6.30 to 7.30, evenings only; one day a week off at 1 o'clock. Age, height, salary required, experience, when disengaged, & Sons, Chemists, East Grinstead.

ANTED, Assistant, Part-time; near Schools; duties entirely Dispensing; must be thoroughly capable. Apply, 200/29, of this Paper.

ANTED, Junior Assistant at once (indoors), age 18-20, in good-class Dispensing business; no Insurance work; youth has passed Preliminary and is not eligible for Army service. Wyatt, Pharmaceutical Chemist, Bootle, Liverpool.

ANTED, Dispenser (male); qualification not necessary if experienced. Apply Dr. Phillips, Hednesford, Staffs.

ANTED, a reliable unqualified Assistant for a good-class country Retail; outdoors; easy hours; must have good references. Apply, giving usual particulars and photo if possible, to Min, Chemist, Ross-on-Wye.

ANTED, good Junior Assistant for Light Retail and Dispensing; indoors; abstainer preferred; no Sunday duty. Call or full particulars, W. Wilson, Pharmacist, 80 Lamb's Conduit, London, W.C.

ANTED, elderly qualified man to Manage a small country branch not far from Manchester; house and lighting free, experience and other particulars, age, and salary required (which must be moderate), to Thos. Tomlinson & Son, Chemists' 45a Market Street, Manchester.

ANTED at once, Junior or Improver (easy hours, usual half-holiday) for Light Retail and Dispensing business; indoors. A. J. Colston, Pharmacist, Malvern Wells.

ANTED immediately, competent outdoor Assistant, single. Apply by wire if possible, stating reference, age, etc., to ards, Chemist, Blandford, Dorset.

ANTED, male Dispenser-Typist at seaside resort; excellent wages and permanency. All particulars to "Dispenser," H. Hoscason & Co., 2 Bridge Street, Manchester.

ANTED, a good qualified Assistant for good General trade; references required; live out; photo required (will return). Apply to "X. Y. Z." (199/36), Office of this Paper.

ANTED at once, a capable qualified Assistant (outdoors), with good-class business experience, capable of taking charge. Salary required and give reference in first letter to "Phar," o/o Messrs. Maw, Son & Sons, Aldersgate Street, London.

ANTED immediately, a Junior Assistant or Improver; indoors; comfortable home; easy hours. State salary required, ences, etc., J. Evans, 28 Agincourt Square, Monmouth.

ANTED immediately, steady reliable man to take charge during temporary indisposition. Wyatt, Broadway, Barnes.

ANTED, Junior or Improver for high-class Retail and Dispensing. Apply, stating full particulars, references, salary, E. Blackmore, 17 High Street, Weston-super-Mare.

WHOLESALE.

LONDON firm requires an Assistant in the Steam Laboratory. State experience of Stills, articles manufactured, salary, etc., Steam (245/3), Office of this Paper.

ENT or Traveller, with sound connection, for London, also for Scotland, in Tablets, Lozenges, Confections, etc. title (245/30), Office of this Paper.

ERK, Junior (male), wanted by Wholesale house for Surgical Sundries Department. State experience, age, and salary to 246/84, Office of this Paper.

ENTER hands wanted in London house, with experience of either Wets or Drys; liberal and progressive wages. Apply, full particulars of experience and age, to 202/40, Office of this Paper.

UG Assistant wanted. State age, experience, and salary. Ayton & Saunders & Co., Ltd., Wholesale Druggists, Liver-

ICE Clerk; must be really smart at the work and young. Apply by letter, stating salary and experience, to Willows, Butler & Thompson, Ltd., 40 Aldersgate Street, London.

INVOICE Clerk, with knowledge of the trade, required by N. London firm of Wholesale Manufacturing Chemists; must be neat writer and accurate at figures. Reply, stating age, experience, and salary required, to 203/6, Office of this Paper.

INVOICE Clerk, experienced, wanted by old-established Wholesale Druggists, London. State experience, age, and salary required to 246/48, Office of this Paper.

MESSRS. R. SUMNER & CO., LTD., Wholesale Druggists, Lord Street, Liverpool, are in want of a good Invoice or Day-book Clerk. Applicants please state experience and salary required.

PHARMACIST, with literary ability and advertising experience, required by large London firm. Send full particulars of age, experience, previous employment, and salary required, to 246/68, Office of this Paper.

PRICHARD & CONSTANCE require a man for Packing, Stock-keeping, and Despatch, also to do Window-cleaning and to make himself generally useful; hours 8 to 8; one day per week 8 to 1; wages 30s. a week; one who has had previous experience in a Chemist's business preferred. Apply personally to Mr. Theakston, 64 Haymarket, London.

RAIMES & CO., Wholesale Druggists, York, require additional Junior Wet-Room Assistants. State full particulars, experience, references, salary required.

REQUIRED at once, expert Packer; only those with previous experience need apply. State full particulars and wages required to "A 1" (247/5), Office of this Paper.

TRAVELLER wanted for Ireland; knowledge of Soap and Perfumery trade essential; one with experience and connection on the ground preferred. Address, "Ireland," The Crown Perfumery Co., Sidney Road, Homerton.

TRAVELLERS calling on Chemists required by a progressive London house putting on the market quick-selling lines to compete against similar German products; vacancies in the Provinces, Scotland, and Ireland, and also one in London; very high commission and exclusive territory in each case; please state principal towns now visited and how often. Reply by letter to The British Products Association, Milton Street, London, E.C.

WANTED, Tablet hands and Improvers, also Pill hands. Apply, stating age, experience, and salary required, to "W. T.", c/o Gains & Co., 19 Moorfields, E.C.

WANTED, reliable Wet and Dry Counter hands. State experience and wages required, John Bell, Hills & Lucas, Ltd., Oxford Works, Tower Bridge Road, S.E.

WET Counterman, experienced, wanted for Wholesale. State particulars previous engagements, salary expected, and all customary information, Timothy White Co., Ltd., Portsmouth.

WET Floor.—Junior Assistant wanted at once. Apply, stating age and wages required, to Willows, Francis, Butler & Thompson, 40 Aldersgate Street, E.C.

WET Room.—Wanted, a Junior Assistant by well-known Northern house; previous experience necessary. Apply, with full particulars in first letter, to "Radix" (244/59), Office of this Paper.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words or less beyond, prepaid.

The Advertiser may, if preferred, have replies addressed to this Office, and forwarded on payment of an additional charge of 6d.

[HOME.] RETAIL.

A THOROUGHLY up-to-date Counterman, Dispenser, and Prescriber requires engagement; accustomed to management; highest references; unqualified. 200/17, Office of this Paper.

A YOUNG man (28) would like change; first-class Dispenser or Counterman; good salary wanted. Apply, 201/19, Office of this Paper.

"ACCIDENT of Circumstance": see advertisement under "Wholesale." Replies invited from Retail also.

A S Branch Manager or Senior Assistant; qualified; experienced; best references; free March. 197/28, Office of this Paper.

ASSISTANT; 45; unqualified; disengaged. Thomas, Cumberland House, Abergale, N. Wales.

ASSISTANT; unqualified; disengaged; 32; tall; 14 years' Dispensing and Counter experience; excellent references. D. Haworth, 32 Mitella Street, Burnley.

ASSISTANT; unqualified; experienced, smart; tactful Salesman; Photographics, Dispensing; excellent testimonials. Apply, 197/38, Office of this Paper.

ASSISTANT, 20, 5 years' experience, desires good berth, in or near Bolton preferred. 196/27, Office of this Paper.

ASSISTANT, Prelim., 22, tall, abstainer, Dispensing or Counter, desires post in Eastern Counties. Full particulars to "Ferrum," 92 Fentiman Road, London, S.W.

ASSISTANT; 26; thoroughly competent; good experience Dispensing, Counter, Photography; tall; abstainer; unqualified; Derbyshire, Yorkshire, or near preferred. White, 64 Abingdon Road, Oxford.

ASSISTANT or Locum; 40; general all-round, Booking, Dispensing, Windows, Photography; South, S.W., or W. of England; liberty end of February. Houghton, Hambleton, Dorechester.

ASSISTANT (27), married, desires permanency; Provincial and West-End experience; good references; London preferred. "Terebene," 9 Jameson Street, Kensington, W.

ASSISTANT or Locum or with view to succession; unqualified; married; age 36; abstainer; having successfully carried on own business with £2,000 returns; in business for self 16 years. 3 Rochester Road, Carshalton, Surrey.

ASSISTANT (25), unqualified, with first-class London experience, seeks situation in City or West End; accurate Dispenser; thoroughly reliable; disengaged shortly. 200/2, Office of this Paper.

BRANCH Manager or Assistant, capable Salesman; London only; unqualified; single; abstainer; 42; 5 ft. 10 in.; all-round experience. "Hodie," 10 Alfearn Road, Clapton, London.

BRANCH Manager or Assistant; all-round experience; N.H.I.; unqualified; tall; 32; London, North, or Midlands. Haigh, 6 Haywards Road, Haywards Heath.

BRANCH Manager; qualified; married; disengaged February 20; long experience Management; smart Salesman, quick Dispenser; active worker; Extractor. Jennings, 61 Tower Street, Dudley.

DISENGAGED; Assistant or Locum; thoroughly competent, reliable, experienced. "Energy," 29 Mardale Street, Shepherd's Bush.

DISPENSER.—Lady (Hall) wishes post with Chemist; good-class experience; references; Midlands. 198/38, Office of this Paper.

DISPENSER or Assistant Manager; first-class experience. "Dispenser," 58 Malvern Road, West Kilburn.

DISPENSER (unqualified); Bookkeeper; educated lady (26) seeks situation in London. 201/29, Office of this Paper.

DISPENSING, Supervising, General work; 42; single; terms to suit; in indifferent health. "Attention" (201/71), Office of this Paper.

EXPERIENCED Manager, married, 32, desires engagement; 17 years' experience in different branches, Optics included. W. Keeling, Pillowell, Lydney, Glos.

GENTLEMAN, elderly, qualified, desires appointment with light duties or Manage a branch with Junior Assistant. Full details, with suggested honorarium, to "Chemicus" (203/2), Office of this Paper.

LADY Dispenser, Hall, 9½ years' experience, excellent references, desires few more hours' Dispensing per week, or Locum five days per week; Chemist, Doctor, Institution. Little, 45 Nimrod Road, Streatham.

LADY Assistant; 8 years' experience; Counter, Stockkeeper; knowledge N.H.I. Pricing; highest references. 197/29, Office of this Paper.

LADY Dispenser, Hall certificate, good experience, desires post. "Hydrargyri" (185/6), Office of this Paper.

LADY Pharmacist requires engagement; London or near. 202/28, Office of this Paper.

LADY, with some Dispensing experience, desires post (not Counter work) with Chemist or Doctor in Eastern Counties; outdoors; willing to teach a few hours daily if desired. 201/24, Office of this Paper.

LOCUM; disengaged on Wednesdays and Fridays; trustworthy. "Qualified," 116 Galloway Road, Uxbridge Road, W.

LOCUM from February 20 onwards. Daykin, Chemist, Vale, Chesterfield.

LOCUM or Part-time until February 13; qualified; all-round experience; London or near; immediately. Gibson, 3 Ma Road, West Kensington.

MANAGER or Locum; qualified; large experience; excellent references. 3 Queen's Terrace, Douglas.

MANAGER; qualified; married; 32; accustomed to high Dispensing; permanency desired; London or Suburbs preferred. "Alpha," 28 Shepherd's Bush Road, W.

MANAGER or Locum; qualified; good all-round experience; absolutely reliable. "M.P.S.," 326 Uxbridge Road, W.

MANAGER (Major); 44; married; own business 11 years; tall; all-round experience; Photography; disengaged. W. Porter, Grauville, Perry Park Road, Blackheath, Birmingham.

MANAGER or Assistant; unqualified; 42; married; disengaged; no Dispensing; wants permanency to Manage Drug Store. 5 Morden Terrace, Morden Road, Merton, Surrey.

MANAGER; capable man; middle-aged; low salary; single. Belsey Place, Newcastle-on-Tyne.

MANAGER, qualified, 31, desires situation end February; all-round experience; married. 199/11, Office of this Paper.

PART-TIME (daily preferred); unqualified; age 30; good all-round experience; in or near Bristol. "Statin," 7 Selb Road, Horfield, Bristol.

PART-TIME; near Liverpool School; good Dispenser. hours and salary, "Student" (197/36), Office of this Paper.

PART-TIME; wide experience; reliable; highest references. "Podophyllin," 9 Stanlake Villas, Shepherd's Bush, W.

PERMANENCY; 35; 18 years' high-class experience; Dispensing; abstainer; unqualified; quick, accurate Dispensing; pushful Salesman; capable taking entire charge; married; doors; undeniable references; 55s.; disengaged end February; smart appearance; 5 ft. 8½ in. "Velox" (199/8), Office of this Paper.

PHARMACEUTICAL Chemist desires Locum work; first experience; now disengaged. 200/40, Office of this Paper.

QUALIFIED; 32; Dispensing and Counter; London preferred. "Robinson," 18 Wilmot Street, Derby.

QUALIFIED; Manager; reliable, experienced. "Ph.C.," 13 Plashet Grove, East Ham, E.

QUALIFIED requires berth; Oldham or district. B. 1 Robinson's Place, Woodbrook, Lees, Oldham.

QUALIFIED, good English and Continental experience, berth in London; good references. Write, "Pharmacist," 150 Mill Lane, West Hampstead.

QUALIFIED Chemist desires post as Manager or position of trust; thorough knowledge of every branch; highest references; disengaged. Apply, "Veteka" (201/5), Office of this Paper.

QUALIFIED; middle-aged; whole or part; North or North London; single. "Permanent" (201/17), Office of this Paper.

QUALIFIED; 26; Manager or Senior Assistant; high-class Dispensing and business experience; can control staff; organ abstainer. "Bundellia," 1 Mansfield Road, Ilford.

QUALIFIED; Manager or Senior; not liable to service; excellent references and experience; disengaged early February; North or Midlands preferred. Address, 202/55, Office of this Paper.

QUALIFIED (young), first-class West-End and all-round experience, energetic, seeks responsible position. 203/1, Office of this Paper.

RESPONSIBLE Assistant (23), possessing first-class Swiss and German-Swiss references, wants post in Pharmacy with Manufacturer or good-class Pharmacy. A. Kamp, Neuchatel (Suisse).

SALESMAN, Dispensing, Photography; Manager; age 30; married; height 6 ft.; good references. "Vim," 28 Cellor Road, Southend-on-Sea.

UNQUALIFIED Assistant; Dispensing, Counter, N.H.I. tractor; country and town experience; single. "C" (196/4), Office of this Paper.

WHOLESALE

ENT of circumstances cause advertiser to seek a situation, however, secondary or temporary, rather than "over forty"; young for his years and alert and active, but has long been in Wholesale (not Pharmaceutical) house; successful Salesman; experienced Bookkeeper and agent; free now. 202/31, Office of this Paper.

TISER, 23 years' sound experience in all-round Ware-work, both Export and Home trade, able to take men and girls, desires change. G. F. Sawle, 43 Fullerton Road, S.W.

OLD Products.—Experienced Chemist seeks post with manufacturing firm; highest references. Apply, "T. L.", 100, Ave Road, Ilford.

TANT (qualified) desires position in Laboratory, with prospects to permanent man. "Aspirin" (201/13), this Paper.

EMAN, with London and Suburban connection, requires for good line which wants pushing. 200/15, Office of this Paper.

GING Clerk for the London house of Johann Maria Anna, Gegenüber dem Jülichs-Platz, Cologne, requires position in consequence of war; office organisation; good on modern lines, up-to-date correspondence, account-keeping and country representation, advertising; young, energetic; first-class education. W. F. Pleasance, 25, Clapham Road, Clapham, S.W.

AMERICA.—Englishman, leaving shortly on a business trip, is open to consider one or two good paying Representations or Commissions from first-class firms wishing to develop with American interests; knows the country and speaks English. Address, "A. C. 854," c/o Deacon's, Leadenhall Street, E.C.

CAL Instruments, Appliances, Druggists' Sundries.—stant, 14 years' varied experience, good references, desires position. Address, 196/28, Office of this Paper.

ELLER, good connection in London and South Coast, Grocers, Stores, etc., seeks permanency in Provision Sundries house. "Lodo," 6 Felday Road, Lewisham, S.E.

ELLER desires to Represent good enterprising house on commission and commission basis; experienced; well introduced; highest reference. "Cheshire" (202/36), Office of this Paper.

Belgian Pharmacists.

This section is devoted to the announcements of Belgian Pharmacists at present in this country. We shall be pleased to insert gratis announcements of a similar character from others who are seeking situations in the Drug trade.

ette section est réservée pour les annonces des confrères qui se trouvent actuellement dans ce pays. Nous sommes heureux d'insérer gratis des annonces semblables de pharmaciens cherchant des places dans le commerce des drogues.

AN Pharmacist, with 20 years' Wholesale experience, seeks situation in Retail or Wholesale; open to Represent any firm in Continental markets after the war; English, Flemish, German, and Dutch languages. R. Van der Vliet, 47 Macleod Road, Kensington, London, W.

AN Analytical Assistant, with skilled knowledge of Food and Analytical, seeks employment; would prefer with those Manufacturers who would possibly open a branch in Belgium after the war. J. Edmond Aps, c/o Mr. Allen, 11, Street, Poplar, E.

DA.—Situation offered to competent and trustworthy young Pharmacist speaking English and French; would be for transport charges. Write to United Drug Co., 10, Hall Street, Liverpool.

ST, who has studied Chemistry at Ghent University and been for a year an Assistant Pharmacist, seeks employment; understands Analytical work and Pharmacopoeial practice; speaks English. R. Nolf, 25 Stopford Road, Walworth, S.E.

Chemical Engineer, ineligible for Belgian Army, desires position; Specialities, Industrial, Agricultural, and Allied products; speaks French and Italian. Write, Albert, 57 Carleton Road, London, N.

MISCELLANEOUS

SECOND-HAND Chemist's Fittings.—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 Old Street, London, E.C.

BEST cash price paid for all old Cameras, any make, also all old Photo goods, no matter how damaged; any kind you may have send them along; cash will be sent same day; no waiting; we buy all and return nothing. S.E. Hackett, 23 July Road, Liverpool, E.

McQUEEN'S A.B.C. System of Accounts; works out profit and loss account, income-tax return, etc., with guaranteed certainty; heavy war-tax and greater insistence in payment must be anticipated; poor bookkeeping may prove costly. Full particulars and testimonials free from McQueen & Co., Moat Road E., Leicester.

B.P., 1914, 10s. 6d. net cash; postage 5d.; two copies 6d., three 7d.; abroad 9d. each; previous offers withdrawn. New and second-hand Books in every department of literature; Chemists' and Students' requirements a speciality; buyers, please name wants, when prices will be quoted. Stirling's Aids to Minor and Apothecaries' Examinations are indispensable, and save College fees; descriptive list free. Gower, Pharmaceutical Bookseller, 41 Voltaire Road, Clapham, London.

SHOWCASES and Shopfittings (second-hand), all ready for instant despatch; 12-ft. Mahogany and Plate-glass fronted Counter, £8 7s. 6d.; 7-ft. very handsome Dispensing Screen, Counter, and Sponge Case, all Mahogany and Plate-glass, £14 10s.; Perfume Case and Desk, 40s.; 4-ft. Mahogany and Bent Plate-glass Counter Case, with Display Shelves, 65s. PHILIP JOSEPHS & SONS, LTD., 93 Old Street, London, E.C.

BUSINESS as Usual: Great War Reductions.—H. Mills, the Chemists' Shopfitter, has a large stock of second-hand modern high-class Drug Fittings, Dispensing Screens, Counter Cases, Glass-fronted Counters, Wall Cases, etc.; absolute bargains; suitable for large Stores or Chemists commencing; cheapest house for modern Shop-fronts, Improvements, Window Enclosures, Glass Shelves; designs, estimates free. MILLS, Shop Front, Shop Fitting, Glass Facia Works, 163-5 Old Street, London, E.C. Phone 550 London Wall.

NO, SIR,

I am not a Pharmacist who has turned ticket-writer, but I have discovered a new method of window-advertising which produces marvellous results in good windows. Write for details.—Bromley, Chemist, Whetstone, Middlesex.

EXCHANGE COLUMN

One halfpenny per word with name and address. One penny per word if we register the address and attach a number. No advertisement inserted for less than 6d.

Price-lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

FOR DISPOSAL.

APPARATUS.

TWO solid gunmetal quinine pessary moulds, usual size, but unique shape, 12's. Billington, Chemist, Blackpool.

DRUGS AND CHEMICALS.

SEVEN 1-lb. bottles pure caustic potash (by alcohol); 12 1-lb. bottles pure caustic potash (ordinary); what offers? Bath Drug Co., Bath.

1 oz. each argyrol, protargol, pyramidon, veronal, diuretin, papain, antikamnia, codein phosph., hydroquinone. 203/3, Office of this Paper.

GLYCERIN, 56-lb. tin 52s. 6d., 3 tins 156s., 4 tins 206s.; potass. permang., 7 lb. 1s. 5d. lb., 28 lb. 1s. 4d. lb.; 1 lb. ext. ipecac. liq., 22s.; 12 B. & W.'s hypo. tabloids morph. sulph., gr. 1/2, 5s., 12 gr. 1/2, 5s. Matthew, 529 Battersea Park Road, S.W.

RAIMES, CLARK & CO., Ltd.

Though practically the whole of our eligible men have joined the COLOURS, we are carrying on "BUSINESS AS USUAL."

We can supply on the best terms all

DRUGS, CHEMICALS and PREPARATIONS

in use by the trade, and are doing our share of supplying the deficiencies caused by the Enemy being driven from the market.

We will send, with pleasure, Quotations & Samples on request.

RAIMES, CLARK & CO., Ltd.

Manufacturing Chemists & Wholesale Druggists, EDINBURGH.

Telegrams: "Raimes Edinburgh."

SPECIALITIES:

**IODIDES and IODINE
PREPARATIONS,
GELATINE CAPSULES,
MALT EXTRACT
and PREPARATIONS,
MILLED OINTMENTS,
&c.**

SHOP FITTINGS.

FOR sale, several standards and brackets, 2 plate-glass mirrors, 22 by 66 in.; all perfect. Gamlen, Chemist, West Hartlepool.

MISCELLANEOUS.

SECOND-HAND water-bed; approval. Williams, St. Philip's, Sheffield.

THREE brass mortars, 9s. each; another with pestle, 12s. Chalmers, 62 Shrubbery Avenue, Worcester.

TWO gross 2-oz. square perfume bottles, cut square mushroom stoppers, 20s. gross; 2 gross 4-oz. ditto, 26s. gross; or near offer for lot. 201/20, Office of this Paper.

OXYGEN cylinder, 20 ft., hemp cover; show jars, Maw's figure 1,456/8; 18½ handsome decorative specie jars; carboys; chemist's books; list forwarded. Hopwood, Richmond, Surrey.

7 lb. ol. menth. pip., American, in 1-lb. bottles, carriage paid, 10s.; Avery's continuous-edge hand balance, perfectly new, with weights, cost 30s., sell 20s. Dickenson, Chemist, Mansfield.

3 lb. lanoline anhydrous at 5s. lb.; 3 lb. lanoline hydrous at 2s. 6d. lb.; 2 oz. cocain. hydrochlor. at 8s. 3d. oz.; 14 lb. arrowroot, St. Vincent opt., at 7d. per lb. Stevens, 97 Borough High Street, S.E.

1 lb. rad. ipecae., 1 lb. pulv. ipecae., ½ oz. atropine sulphas, 1 lb. sem. eardam., 8 oz. salicin, 4 lb. sang. dracon. pulv., 36 large Perrier, 18 small Apollinaris; what offers? Johnston, 16 Main Street, Larne.

WANTED.

WANTED, good pedestal carboy stand: Gamlen, Chemist, West Hartlepool.

"PUNCH" wanted weekly. State terms, Brown, 92 East Claremont Street, Edinburgh.

CORALOIDS. Kindly state number of boxes offered and price, March, Pharmacist, Torquay.

HAND sifting and mixing machine, Gardner's or other make, 199/14, Office of this Paper.

WANTED, complete fittings and utensils for chemist's shop. Postlethwaite, Chemist, Morecambe.

RADIUM applicators (damaged). Glew, Chemist and Radiographer, 156 Clapham Road, London.

WANTED, 1-lb. original bottles Schering's levulose; any reasonable price paid. Colby, 101 Western Road, Brighton.

PLATE-GLASS shelves, one 48 in. by 12 in. and one 48 in. by 9 in., polished edges. Green, Chemist, Somersham, Hunts.

"CHEMIST AND DRUGGIST," January 2, 1915; 4d. for clean copies. Post flat to "S. B.," Office of this Paper.

WANTED, second-hand dental engine, foot power, with silicon attachment; extraction forceps; vulcaniser; ½-in. oil silicon lens. 242/35, Office of this Paper.

WANTED, various moulds for glass bottles, medical, etc. description, condition, if with gauges, and lowest price, P. 97 Southwark Park Road, S.E.

WANTED, shop-rounds, syrups, poisons, oils and waxes. State quantity and lowest price carriage paid, W. Chemist, Eccles.

WANTED, collapsible tube filling machine, ½-in. tubes; in good order and cheap. State full particulars, Hold. Pepps Road, New Cross, London.

OPTICAL books; Minor, Major, Chemists' books; send price valuation; cash offers per return. Gower, Bookse Voltaire Road, Clapham, London, S.W.

ADDRESSES WANTED.

PRESENT address of Mr. Philip H. Crewe, Chemist. R. 237/27. Office of this Paper.

Please Try Our DISPENSING BOTTLES & PHIALS.

We send six gross assorted or otherwise, carriage paid, to dress in the United Kingdom. Smaller quantities not carried.

REDUCED PRICES.

Clear Blue Tinted.—Good Quality.
3 & 4 6 & 8 12 16 ozs. Plain or graduated, round edges.
8/- 9/- 13/- 18/- per gross.

Clear Blue Tinted. Best Quality. QUININE.
3 & 4 6 & 8 12 16 ozs. Plain or graduated, round edges.
10/- 11/- 16/- 20/- per gross.

CHEAP BOTTLES for Dispensing.
3 & 4 6 8 ozs. Plain or graduated, round edges.
7/- 8 3 8 6 per gross.

WHITE PHIALS—GOOD QUALITY.
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 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Late News.

42 Cannon Street, London, E.C.,
Thursday, January 28.

the rest of this Winter Issue went to press we have reports from various centres, and give the gist of more important, and add a supplementary Trade, including our American correspondent's cablegram.

"Business as Usual."

advertisement by Raimés, Clark & Co., Ltd., Edin- on p. 192 of this Supplement should be read along with our other announcement on p. 118 of this Winter the supplementary one having reached us too late for ation.

Posological Tables, B.P. 1914.

is the title of a booklet issued by Jewsbury & Brown, k Green, Manchester. The special feature is that s and strengths of the P.B. 1893 and 1914 are placed side, so that the changes can readily be seen. The are printed on the right-hand side, the left being p with notes on the Jewsbury & Brown products. It ul book for the student as well as the pharmacist.

Personal Paragraphs.

ate John Burton Shelley, chemist and druggist, Place, Bilton, Staffs., left estate valued at 596*l.* 11*s.* 4*d.* net personalty 27*l.* 12*s.* 2*d.*

te Frederick Gottfried Graf, drug-merchant, 65 Fen- Street, London, E.C., left estate valued at *s.* 3*l.* gross, with net personalty 7,365*l.* 12*s.* 2*d.* all his property to his mother and sister, Sophie Graf, the latter being sole executrix.

i, Claridge Druce, J.P., M.A., F.L.S., Oxford, been elected President of the Ashmolean Natural Society of Oxfordshire. He occupied the Chair in e was also President of the Midland Union of History Societies in 1896 and 1905. He has been olean's Treasurer for twenty-five years.

nt M. G. Smith, F.C.S., dispenser at Lewisham s, and past President of the Public Pharmacists' oners' Association, has gone with his regiment, e Royal West Kent, to India. Sergeant Smith is to the medical officer's staff at Jhansi, N.W. Pro- r. E. G. Price, deputy-dispenser, is filling his ng his absence.

ow Woolcock issued, on January 26, a "private idential" letter to Pharmaceutical Committees Supplementary Tariff (prices for February), ative expenses (agreement with medical repre- arrived at), joint checking and scrutiny, drain Fund (recommendations to panel doctors to pre- scribe prescribing), and pharmacopoeial doses.

Southport Insurance Committee.

meeting on Tuesday evening, January 26, a state- the expenditure in 1914 was submitted. It showed balance on all the funds except the Drug Fund. ee Committee recommended payment of accounts to 230*l.* 14*s.* 5*d.* The Assistant-Clerk (Mr. D. remarked that the chemists are to be paid 50 per o December 31, and the doctors 75 per cent. for residents. Mr. Jackson was questioned by embers about the Drug Fund, but he would not self to saying that the deficit would be made up of 1915, and the Chairman advised the members til the next meeting, when fuller details will be The Finance Committee will go into the matter n, it being a question of prescription and other r. Righton: "I suppose you mean the Panel acinaceutical Committees?" The Assistant-Clerk: matter for the Panel and Pharmaceutical Com- airily."

Association Affairs.

—The Glasgow and West of Scotland Chemists' met on January 21, Mr. McMillan presiding, Horace G. Gray, discoursing on "Commercial" did not disappoint the large audience. He has nions on men and things, and an emphatic way hem, happily with the saving grace of humour: red the professional status of the pharmacist a said so; further, that dispensing as a means of iving should not be overrated, as it is a business be pushed or expanded, and its volume is not provide a livelihood for any considerable number onidering it as a department, he advocated that unds should be removed from the front and put

away to the back, and their space used for good fresh sale- able stock. The windows should have a chance of show- ing their value as business-attractors, and the whole energy of the pharmacist and his staff should be concentrated towards swelling the volume of trade done and increas- ing the profit earned. A commercial course should be an important part of the curriculum of every student, and should be an examination subject before a man could be considered ready to open a pharmacy. He submitted figures showing that a pharmacy with a turnover of 1,000*l.* a year, and working-expenses 18 per cent., must have gross profit of 43 per cent. to yield an income of 250*l.* A critical discussion followed, Mr. J. P. Gilmour and Mr. T. Guthrie being among the speakers.—A whist-drive was held in the Charing Cross Hotel on Tuesday evening, January 26, under the auspices of the *Pharmacy Athletic Club*, more than 150 ladies and gentlemen present. Mr. McKay (President) was in charge, and the following prizes were won: *Ladies*—1, Mrs. Sutherland; 2, Miss M. Black. *Gentlemen*—1, Mr. Logan; 2, Mr. Grierson. Tea having been served, the trophies and prizes won by the members of the Golf Section during the past season were, in the absence of Mr. John Foster (Hon. President), presented by Mr. John Murchie. The winners were: McKay Cup, Mr. W. J. Moffat; Virol Cup, Mr. D. M. Henderson; Hatrick Trophy (pairs), Messrs. Jas. Crombie and J. E. Black; T. & H. Smith Cup, Mr. D. M. Henderson; runner-up (gold badge), Mr. Wm. Seivwright; McAdam War Fund Prize (timepiece), Mr. W. S. Galbraith; Hyslop War Fund Prize (solid silver cigarette-case), Mr. J. E. Sutherland; Monthly Medal, Mr. Richard Hogg. Finally, a delightful hour was spent with songs and readings.

LONDON.—The Executive Committee of the Pharmaceu- tical Association met at 17 Bloomsbury Square on Tuesday, January 26, when nine items of business were considered, most of them being of a routine character. In the discus- sion of one of them, about an Insurance dispensing matter, it was stated that thermogene wool and gossypium capsici are regarded as appliances, and, not being in Schedule 2, should not be supplied by chemists for Insurance account. A Sub-Committee suggested that a list of questions on trade matters should be circulated to members in the county, but the suggestion was referred back for consideration and report at the next meeting. Regarding the sale of tinct. opii, 1914, the Pharmaceutical Council's resolution was accepted, and it was suggested that, if laudanum is sold by itself, threepennyworth should be the least quantity sup- plied, and this must be signed for.

PUBLIC PHARMACISTS.—The annual meeting of the Public Pharmacists' and Dispensers' Association was held at St. Bride Institute, London, E.C., on January 27. Mr. J. H. France was in the chair. The report of the Council showed that the Association has well maintained its position. Thanks were accorded to Mr. T. H. W. Idris, J.P., for continuing to act as President. The Treasurer's report showed the financial position to be satisfactory. Mr. J. H. France gave an address, in which he reviewed the work done by the officers since the formation of this branch of pharmaceutical workers. The new officers appointed for 1915 are: *President*, Mr. T. H. W. Idris, J.P.; *Chairman*, Mr. J. H. France; *Vice-Chairman*, Mr. R. Welford; *Hon. Secretary and Treasurer*, Mr. G. W. Gibson; *Hon. Secretary, Poor Law Section*, Mr. R. W. Lindsey; *Council*, Messrs. W. E. Kinsman, A. Howell, A. J. Gibbons, A. Jenkin, H. Skinner, W. Windmill, H. Hewitt, and F. W. Moore. A collection of 2*s.* 6*d.* per member was made for the Belgian Doctors' and Pharmacists' Relief Fund. Any member who was unable to be present is invited to forward a contribution to the Hon. Secretary.

THAMES VALLEY.—A meeting of the Thames Valley Phar- macists' Association was held on January 27 at the Thames Valley Café, Kingston-on-Thames. Mr. Bunker (Twicken- ham, the President) occupied the chair. It was decided to make a grant of five guineas from the Association for the Belgian Doctors' and Pharmacists' Relief Fund. Several of those present expressed a wish to contribute personally towards the Fund, and so bring the amount up to ten guineas. Mr. H. E. Clement (Hampton), of the Middlesex County Association, presented a report, in the course of which he said several cases of excessive prescribing had been investi- gated, and the necessary surcharge on the doctors had been made. "Rept. mist." is no longer allowed, and pharmacists should refuse to dispense such prescriptions. A list is being compiled of what may and may not be supplied to Insur- ance patients, and a copy of this will be sent to every chemist on the panel. The discounting for the past year will only be about 10 per cent. or at the most 12½ per cent. Mr. A. Higgs, J.P. (Kingston), of the Surrey County Association, reported that in Surrey chemists would be paid in full. "Aqua" in a prescription means aqua dest.,

and should be charged for. Aqua font. means tap-water, for which no charge is made. The Surrey Panel Committee is considering the compilation of a Formulary for use in the county, but Mr. Higgs said he thought chemists are safe from stock mixtures, as the Insurance Committee is not in favour of them. As regards complaints that chemists are not paid promptly, the fault in a measure lies with the chemists themselves, who do not render their accounts promptly. A short discussion then ensued on *The New Pharmacopœia*, attention being drawn to the altered strength of tincture of strophanthus and tincture of opium. Mr. Palmer (Twickenham) said the compilation of the Pharmacopœia should be in the hands of pharmacists, not in the hands of the medical profession, for each new one that is published is more and more a wholesalers' Pharmacopœia. Addresses were then given by Messrs. Evans (Hammer-smith), Cherry (Walton-on-Thames), and Brumwell (London) on the *Ucal System* of co-operation in pharmacy, the subject being treated in an attractive manner. A long discussion ensued, and the critics were answered by Mr. Cherry. Several of those present expressed their intention of becoming members.

WEST BROMWICH.—The annual meeting of the West Bromwich Pharmaceutical Association was held on January 26. The following officers were elected: *President*, Mr. I. M. Withers; *Vice-President*, Mr. M. H. Griffith; *Treasurer*, Mr. J. R. Allen; *Hon. Secretary*, Mr. C. W. Kemsey-Bourne; *Executive Committee*, the officers given above with Messrs. E. Beattie and A. S. Barnes. The Hon. Secretary was elected to represent West Bromwich on the Insurance Prescription-checking Committee (i.e., the Smethwick Checking Scheme—Smethwick, West Bromwich, Dudley, and Wolverhampton combine for checking National Health Insurance scripts). The Secretary's report showed that there are thirteen members, and that twelve meetings had been held. The Executive Committee met six times. The report gave a brief account of the meetings, which were very varied in character. The Treasurer's report showed a balance in hand of 23s.; 4l. 17s. was subscribed by members to the Pharmaceutical Parliamentary Fund. Mr. Keen, with Bullus & Co., Ltd., was elected a member.

Coming Events.

This section of the "C. & D." is reserved for advance notices of meetings or other events. These should be sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Monday, February 1.

Society of Chemical Industry (London Section), Burlington House, Piccadilly, W., at 8 P.M. There will be a display of chemicals and laboratory apparatus of British manufacture, and a debate upon a resolution urging the Government to take such steps as will tend to the permanent production and refining within the Empire of sugar sufficient for the Empire's consumption.

Wednesday, February 3.

Pharmaceutical Society of Great Britain, 16 Bloomsbury Square, London, W.C., at 11 A.M. Council-meeting.

Institute of Sanitary Engineers, Caxton Hall, Caxton Street, Westminster, S.W., at 8 P.M. Mr. V. H. Mackinney on "Problems in Modern Illumination."

Pharmaceutical Society of Great Britain (North British Branch), 36 York Place, Edinburgh, at 8.30 P.M. Evening meeting (postponed from January 22). "The British Pharmacopœia, 1914, in its Bearing on Official Pharmacy," by Mr. J. P. Gilmore. "Alkaloids, Chloroform and Opium Preparations," by Mr. D. B. Dott, Ph.C., F.I.C., F.R.S.E. "Official Tests for Lead and Arsenic, etc.," by Dr. J. F. Tocher, F.I.C., Ph.C. "Notes on Nomenclature, Oils, and Syrups," by Mr. W. B. Cowie, Ph.C., F.C.S. "Notes on the B.P. 1914," by Mr. Fraser Mediarimid, Ph.C.

Thursday, February 4.

Chemical Society, Burlington House, Piccadilly, London, W., at 8.30 P.M. The following papers will be communicated: "Metallo Compounds of Cobalt and Nickel," by Prof. S. U. Pickering; "Preparation of Dinitro-dichloro Methane by Simultaneous Nitration and Chlorination of Acetone," by Mr. J. N. Rakshit; "Azotisation by Chloroamine," by Dr. M. O. Forster.

North London Pharmacists' Association, St. Padarn's, Salterton Road, Seven Sisters Road, N., at 3 P.M. Address on "How to Make a Living."

Great Yarmouth Pharmaceutical Association, 156 King Street, at 8.30 P.M. Ordinary meeting.

Friday, February 5.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, London, W., at 9 P.M. Professor A. W. Crossley on "Science and Industrial Problems."

Blackpool and Fylde Pharmacists' Association. Annual meeting.

Thursday's Market News

Cablegram.

NEW YORK, January 27.—Business in drugs is fair. Cloves is 10c. per lb. lower at \$8.60 per lb.; Peppermint tins is higher at \$1.60. Menthol is unchanged. Java easier at 9c. per lb. Buckthorn-bark is lower at 25c. Hydrastis (golden seal) is higher at \$4.75—an advance. Canada fir-balsam has been reduced to \$6.50 per Copeiba is easier at 34c. per lb.

AGAR-AGAR is dearer, with sales of Kobe No. 1 at 2s. 3d. and No. 2 at 2s. on the spot; stocks are extremely small.

ANISE OIL (STAR).—Arrival price of "Red Ship" firmer, at from 3s. 3d. to 3s. 4d. c.i.f.; spot is 4s. 3d.

ANTIMONY is strong and dearer, English regulus quoted 70l. to 72l., second brands 66l. to 68l., and 65l. ex warehouse. China crude is 35l. on spot.

CHILLIES.—Zanzibar and Mombasa description have cleared; last price paid was about 85s. per cwt.

CITRIC ACID.—More doing this week, at from 2s. 2s. 6d. per lb.

CODEINE.—Quiet, at from 23s. to 23s. 6d. per oz. net. COPPER SULPHATE.—Dearer, owing to scarcity; foreign brands 26l. per ton is quoted for prompt and delivery.

CORIANDEER-SEED is again dearer, good Morocco been sold at 12s. up to 12s. 6d. per cwt., and 13s. now asked.

CREAM OF TARTAR is in fair demand, at 145s. per 98-per-cent. powder.

GUM ACACIA.—The value of fair half-hard Sudan sc crop is about 32s. 6d. on spot, and to arrive a fair has been done at 29s. c.i.f.

HEXAMINE has eased off, at from 2s. 10d. to 3s. per IPECACUANHA.—Business at the close is reported at Matto Grosso.

LINSEED is dearer, at 54s. per quarter for Morocco 57s. 6d. for clean small seed.

MILK-SUGAR in fair demand, good Dutch make quoted 75s. to 77s. 6d.; other makes, 72s. 6d.

MINT OIL.—Fair sales of Japanese (Suzuki) have been made at 3s. 4d. net, but 3s. 5d. is asked at the MORPHINE.—Quiet, at from 13s. 3d. to 13s. 6d. per for hydrochloride powder.

ORANGE-PEEL.—Recent arrivals of new-crop thin strip comprise between 50 and 60 cases, the value 1s. 9d. per lb.

OXALIC ACID is 2d. per lb. dearer, at from 8 1/2d. per lb. net as to quantity.

PEPPER is firm, but quiet, fair black Singapore off spot at 6d., fair Tellicherry 6 1/2d., and fair Lampong to arrive, sellers of Singapore for January-March quote 5 1/2d. c.i.f. White Singapore on the spot is 9 1/2d. for fair, Muntok 10d. to 10 1/2d., and Penang sellers of Singapore for January-March shipment 9 1/2d. c.i.f.

PEPPERMINT OIL.—Our American cable intimates advance to \$1.60; price to arrive is now nearer 6s. 6d.

PHENACETIN.—Rather firmer, at 7s. to 7s. 3d. PHENAZONE is difficult to quote owing to scarcity, worth from 10s. 3d. to 10s. 6d.

PHENOLPHTHALEIN is quoted 8s. 6d. per lb.

POTASH SALTS.—Offers from New York include Potash Carbonate, 80 to 85 per cent., in usual about 12 cwt., at 30l. per ton; 90 to 92 per cent. a ton. Potash Bichromate, usual casks of about 7 1/2d. per lb. Potash Permanganate, in casks of drums of 1 or 2 cwt., at 7 1/2d. per lb., all c.i.f. London against documents, insurance, including war-risk engagement. Prussiate is easier at 1s. spot; soda 7d. per lb. Potash Chlorate is quoted at from 1s. 6d., according to seller and circumstances; 8d. to 8 1/2d.

SAFFRON is very firm, finest Valencia offering 45s. to 45s. per lb. net.

SALOL closes firmer at from 5s. 6d. to 6s. per lb. SOY.—Firm and dearer, with sales of the usual at 1s. 8d.

SULPHONAL.—Rather firmer at the close, at from 15s.

SULPHUR closes a firm market, and likely to be a TARTARIC ACID.—Steady at 1s. 6d.; export demand principally to Russia at the moment.

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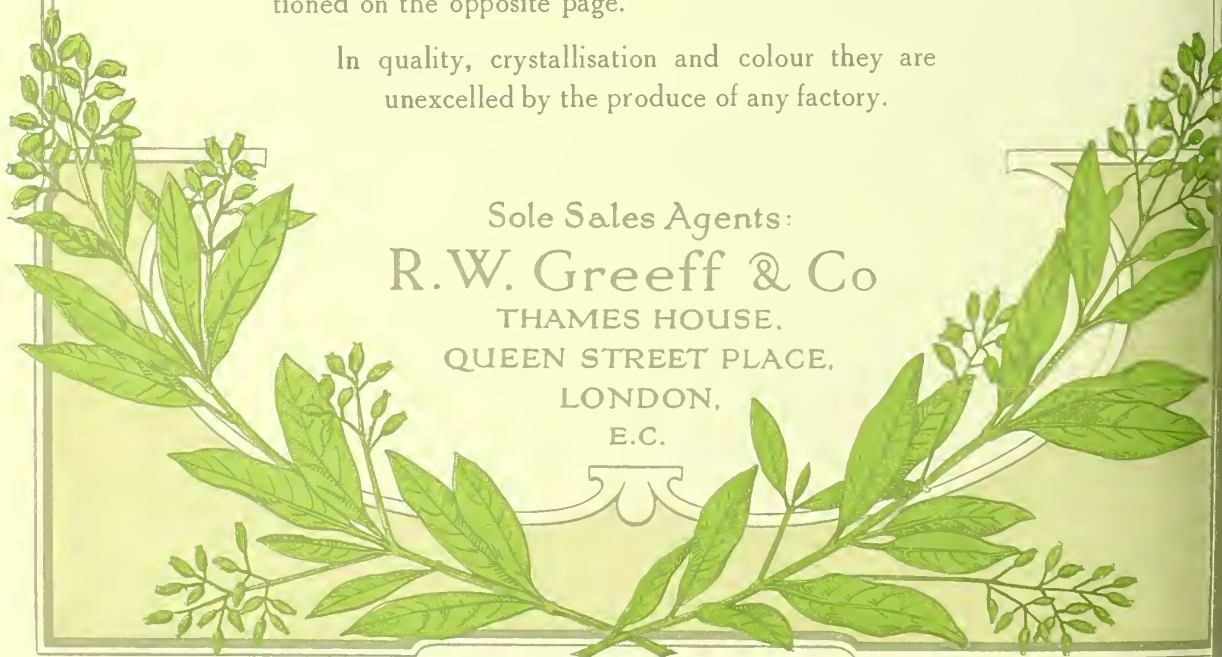
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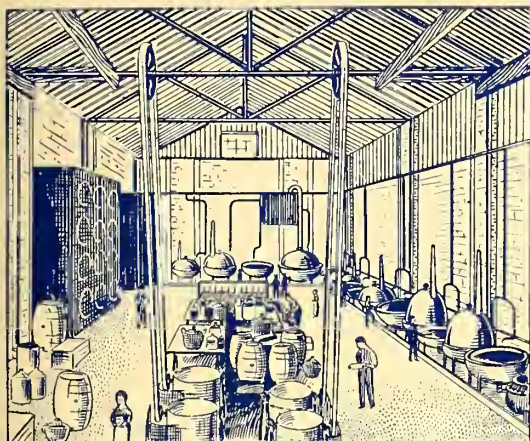
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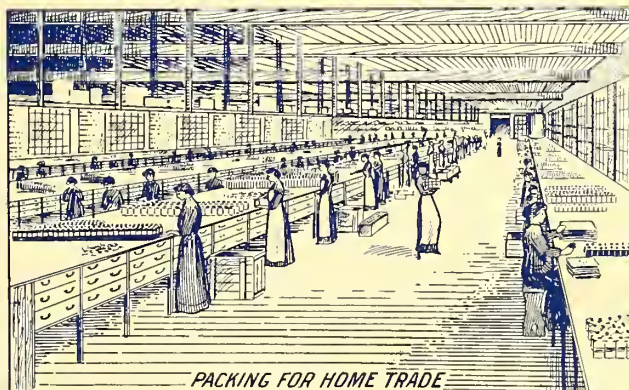
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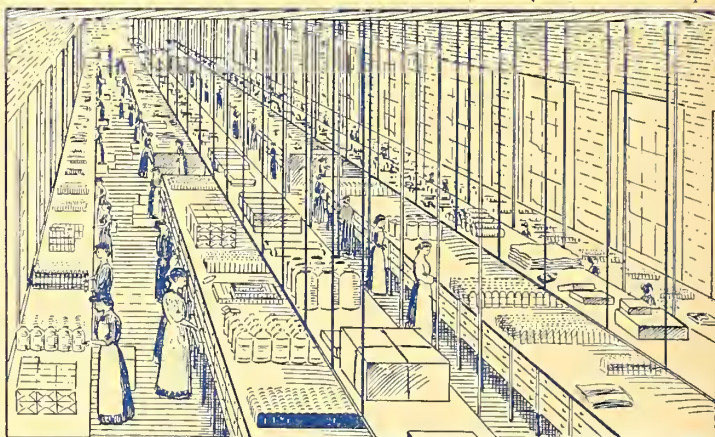
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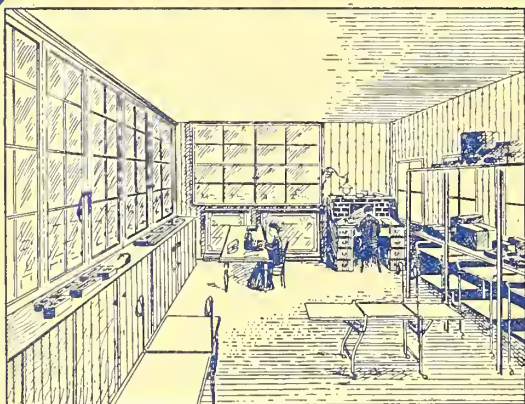


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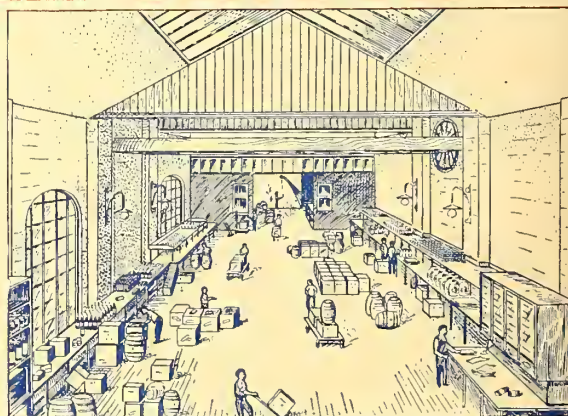


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THE word “VASELINE” was not entered in the British Pharmacopœia, 1898, because it was our “Trade Mark,” and we could not afford to surrender it, but in place thereof the phrase “Paraffinum molle” (meaning soft paraffin) was invented and adopted, being intended to represent a substance identical with “VASELINE”; in fact, the “characters and tests” in the Pharmacopœia were a correct description of “VASELINE,” which thus became the official standard. It is to be regretted that the British Pharmacopœia, 1914, omits the specification “free from acidity, alkalinity, or any unpleasant odour or flavour, even when warmed to 120° F. (48·9° C.),” but this omission makes it all the more necessary that Medical men should prescribe “VASELINE” and not Paraffinum molle. In respect to the omitted characters, “VASELINE” remains of the highest degree of purity, and it may be inferred that commercial varieties of soft paraffin do not accord with these stricter characters of the old Pharmacopœia.

As these articles or preparations are sometimes prescribed by Medical men, and Pharmacists dispense under the mistaken impression that they are the “same things as ‘VASELINE,’” it is important that they should observe the characters which make “VASELINE” a substance *sui generis*, and in the interest of the Public and of Physicians it should be clearly understood:

1st. That any kind of “Paraffinum molle” is not “VASELINE,” in method of manufacture, composition, or medicinal properties, soft paraffin being quite another and a different thing from “VASELINE.”

2nd. That “Paraffinum molle” has come to mean a semi-solid, unctuous petroleum product which may be worthless and even noxious, varying in quality and colour from axle-grease up, and the great bulk of which is sold as similar to our product, and on the reputation for value obtained by it.

3rd. That “VASELINE” is not only valuable as a vehicle, but has great value of its own as a curative, both for external and internal use, and as a destroyer of germs and micro-organisms. Soft paraffin, on the contrary, even if safe to use, has no medicinal value, and is simply a vehicle. One ounce of soft paraffin usually obtainable, taken internally, might produce disagreeable results, whilst “VASELINE” is entirely harmless internally, and indeed, of the greatest benefit in inflammation of the throat, chest and stomach, as well as a safe and sure laxative, intestinal lubricant.

We may also remind members of the Medical and Pharmaceutical Professions that the discovery of “VASELINE” has proved to be of great importance in Medicine, Pharmacy, and the Arts. This Company has spent more than a million pounds in building its works and introducing its products; it cannot afford, therefore, and should not be asked, to surrender its Trade Mark.

**CHESEBROUGH MANFG. CO.(CONSOLIDATED), NEW YORK,
42 HOLBORN VIADUCT, LONDON.**

For Price List see opposite page.

Some of the "Vaseline" Specialities and their Prices.

Trade Mark Registered

Yellow.

PENNY TINS	7/- per gross.
TWOPENNY TINS	13/- "
No. 1 size, in boxes of 1 gross	18/6 "
" 1 " " 3 dozen	18/9 "
" 2 " " 1 "	37/- "
Collapsible tubes, No. 1 size, 2/6.	No. 2 size, 5/- doz.
No. 1 size, bottle, in cardboard case	3/- per doz.
" 2 " " " "	5/- "
1/2-lb. tins, round	6/3 "
1 " " square	10/6 "
5 " " " " " "	30/- "
10 " " " " " "	5/- per tin.
25 " " " " " "	12/3 "
50 " " " " " "	24/- "

White.

Twopenny Tins (three doz. in box)	13/6 per gross.
Collapsible tubes, No. 1 size	3/4 per doz.
" " " 2 "	5/3 "
Blue Seal, in bottle, carton	3/6 "
No. 1, 3-oz. size, in cartons	6/- "
" 2, 6-oz. " " "	10/- "
1/2-lb. tins, round " " "	10/- "
1 " " square " " "	17/- "
5 " " " " " "	60/- "
10 " " " " " "	9 3 per tin.
25 " " " " " "	22/- "
50 " " " " " "	41/6 "

Red or Veterinary.

1/2-lb. tins, round	4/- per doz.
1 " " square	6 8 "
5 " " " "	22/- "
10 " " " "	3/6 per tin.
25 " " " "	7 6 "
50 " " " "	13/4 "
Half-barrels, about 1 1/2 cwt.	28/- per cwt.
Barrels, about 3 cwt.	24 6 "

Carbolated-Veterinary.

1-lb. tins	7/- per doz.
5 " "	2/- per tin.
10 " "	3/8 " "

Sulpho for Dogs.

In jars	9/3 per doz.
In 5-lb. tins	4/8 each.
10-lb. tins	8/- each.

White Liquid Petroleum.

No. 0 size bottle	8/3 per doz.
" 1 " "	16/6 "
" 2 " "	24/9 "

Analgic 9/- per doz. tubes.

Borated 4/6, 7/6 "

Camphorated 5/-, 7/6 "

Capsicum 5/7, 9/- "

Carbolated 4/3, 7/6 "

Mentholated 5/7, 9/- "

Oxide of Zinc 5/7, 9/- "

Perfumed White.

Collapsible Tubes	4/3
No. 1 (bottle in carton)	8/3 per doz.
" 2 size, handsome bottle in carton, with glass stoppers	12/6 "

Hair Tonic.

No. 1 size	8/9 per doz.
" 2 " "	17/6 "

Pomade.

No. 1 size, in boxes of 1 gross	20/- per gross.
" 1 " " 3 dozen	20/6 "
" 2 " " 1 "	62/- "
Collapsible Tubes	2 9 per doz.
No. 1 size, bottle, in cardboard case	3/10 "
" 2 " " " "	7/9 "
White and Quinine Pomade	8 3 "

Perfumed Oil.

One size, in bottles (for the Hair)	6/9 per doz.
-------------------------------------	--------------

"Vaseline" Soaps.

UNSCENTED.

3d. tablets, boxes of 1/2 doz. tablets, 27/- per gross tablets.

PERFUMED.

3d. tablets, boxes of 1/2 doz. tablets, 27/- per gross tablets.

SUPERFINE.

Delicately perfumed, box of 3 tablets, 5/- per doz. tablets.

TAR.

3d. tablets, boxes of 6 tablets ... 27/- per gross tablets.

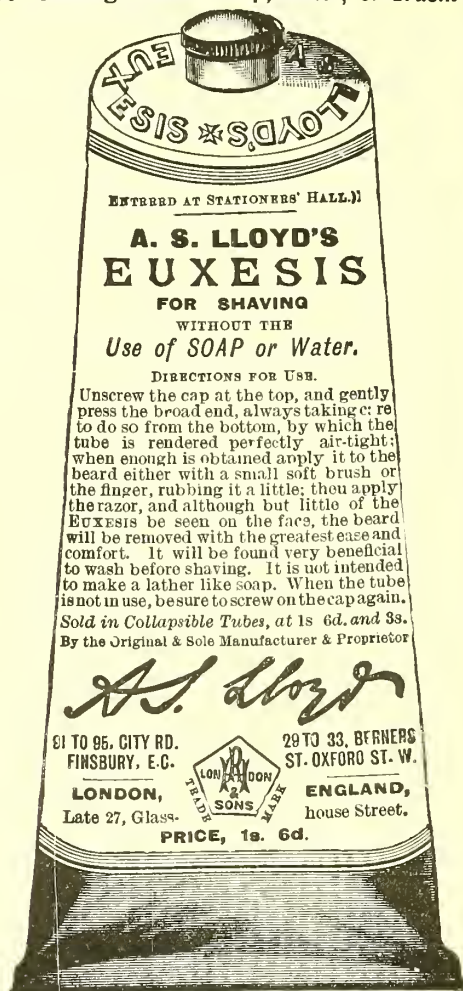
CHESEBROUGH MANFG. CO. (CONSOLIDATED), NEW YORK,
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Complete Price List sent on application.

A. S. LLOYD'S EUXESIS

(THE GENUINE.)

For Shaving without Soap, Water, or Brush.



Sold by all Perfumers and Chemists
throughout the World.

R. HOVENDEN & SONS having purchased, under an administration suit, the Business of the late A. S. LLOYD, with the Receipt, Trade-mark, and Goodwill of the celebrated Euxesis, the Trade are cautioned that the original and genuine Euxesis is now manufactured at our Factory ONLY, and may be obtained at either of our Warehouses at the following prices:

10/- per dozen, 9/6 by the 3 dozen, 9/- by the 6 dozen.
Retail at 1/6 the Tube; 3/- size to order.

NOTICE.—THE GENUINE A. S. LLOYD'S EUXESIS bears a label printed in BLACK only on a Yellow ground, with our Trade Mark at the bottom, as Illustration.

Proprietors: R. HOVENDEN & SONS, LTD.,
LONDON: 29-33 Berners Street, W.; and 89-95 City Road, E.C.

THE "THREE SPEE" SAFETY RAZOR



(PATENT 18690/13)

with *the*
ADJUSTABLE BLADE

BRITISH MADE.

Fixed Trade Price 60/- doz.

Fixed Retail Price 7/6 each.

BLADES, 21/- per gross.

Retail, 3/6 per doz.

Terms: 2½ per cent., 30 days.

Heavy Electro-plated, first-class finish, in neat "REXINE" covered case, lined velvet and satin, complete with six blades and stopper. Once adjusted remains locked permanently. Blades easily stropped. Frame can be adjusted to take solid blades. Blades fixed in a second. Impossible for blades to rust.

Sole Distributor for the Manufacturer:

William P. Kelland

36 Camomile St., London, E.C.

And 52 St. Enoch Square, Glasgow.

BEETHAM'S "LAROLA"

(Registered)

Is the Skin Tonic for 1915.

It is effective.

It is attractive.

It is price-protected.

It is well-advertised.

It sells readily.

It bears a good profit.

HAVE YOU OUR SHOWCARD?

THIS IS WHAT THE "C. & D." SAYS OF IT:

BEETHAM'S NEW SHOWCARD.—One of the prettiest lithographic productions which have come to us lately is the Larola beauty here depicted. The card measures 24 in. by 18 in., and is all roses, even the word "Larola" being formed from prickly rose-stems. The fair rose-gatherer has rosy cheeks, and she and the setting make so bright a picture that no pharmacy will be complete without it. Copies can be obtained from Messrs. M. Beetham & Son, Cheltenham, the originators of Glycerine-and-Cucumber and Larola.

This handsome Showcard, in 14 colours (size 24 by 17) can be had by any chemist who will give it a good place in his pharmacy.

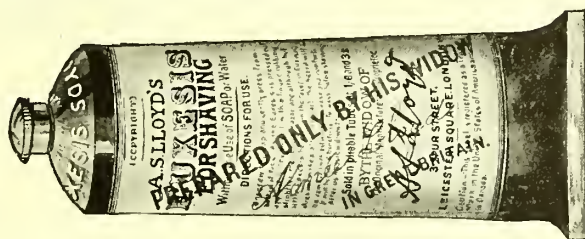
M. BEETHAM & SON, Cheltenham,

A. S. LLOYD'S EUXESIS

For Shaving
without
Soap, Water,
or Brush.

CAUTION to the TRADE

Labels on the genuine **EUXESIS** not only bear signature of A. S. Lloyd in Black Ink, but also "Prepared only by his Widow and signature of 'Aimee Lloyd'" in **RED**.



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N.B.—When ordering from Wholesale Houses write LLOYD'S EUXESIS (WIDOW'S).



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 Also Powder in Envelopes, at
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In **WHITE**, **KHAKI**, and all Colours.



SPECIAL.

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4/6 per dozen, assorted colours.

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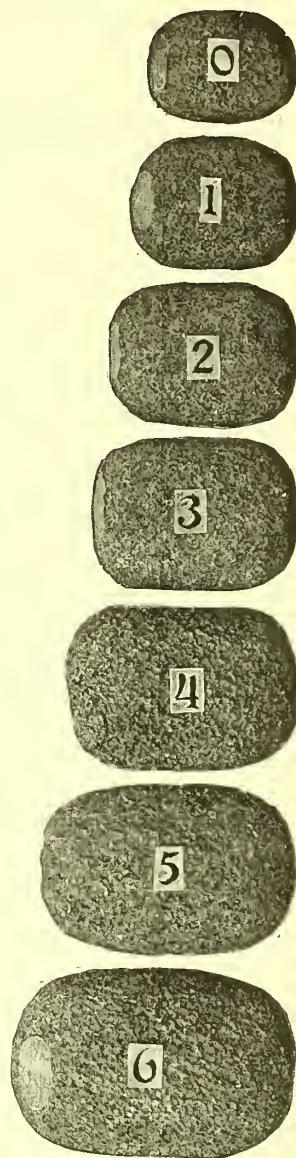
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THE CAPTIVE CAP TUBE



The Cap cannot fall into the mud or get lost; the size of the package diminishes as the contents are used; and the efficiency of the product is unequalled.

NOW is the time to show it and push it

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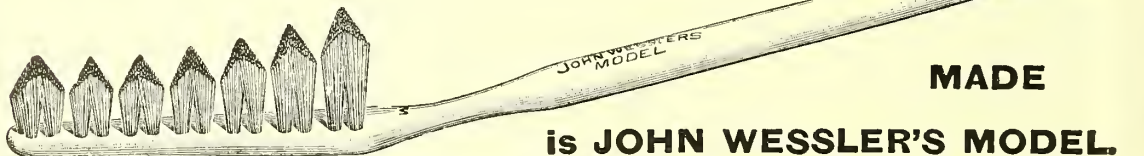


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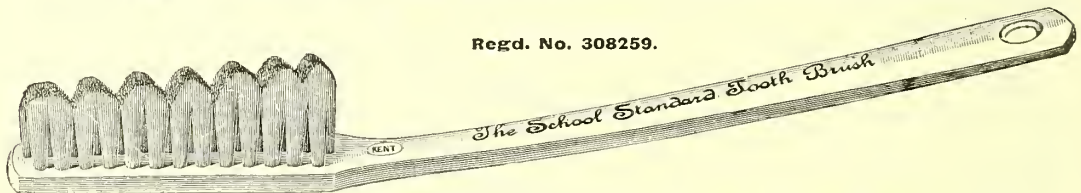


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Regd. No. 308259.



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23/- and 27/- per gross.

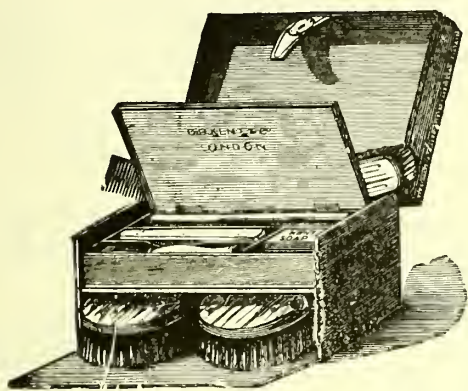
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As the oldest and largest manufacturers of Best British Brushes in the world, we can give you better value than foreign makers.

Try our QUALITY and see.

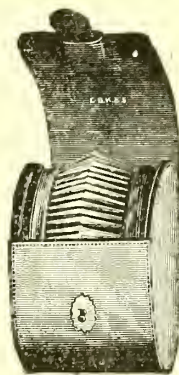
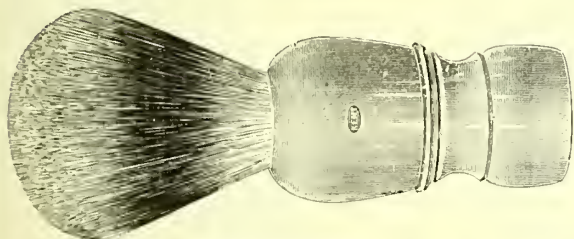
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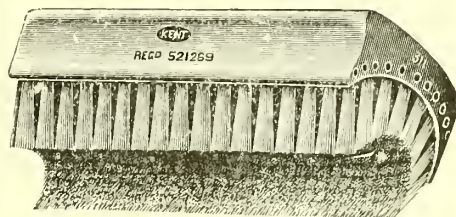
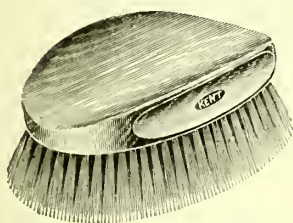


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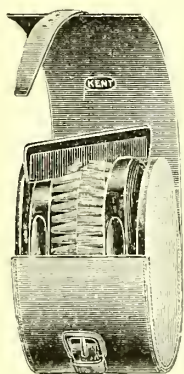
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Spring Clasp.

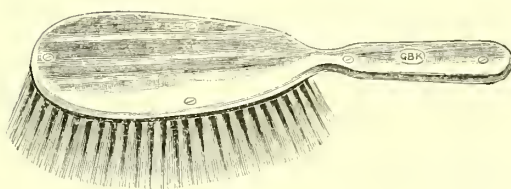
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The "Knuckle" or Finger Brush.
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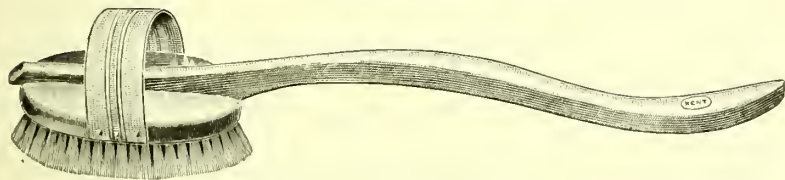
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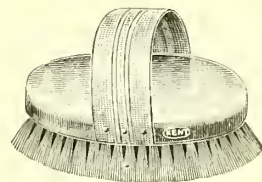
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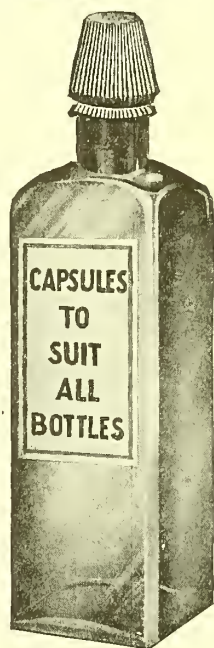


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BEST BRITISH BRUSHES

THE BEST!
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THEY ARE SMITH'S,
And all BRITISH Manufacture!



PRICE LIST (as usual.)

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„ 39, for Winchester Quarts...	8d. „
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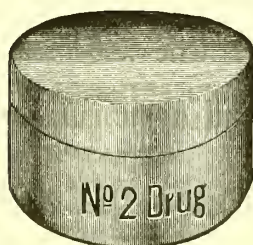
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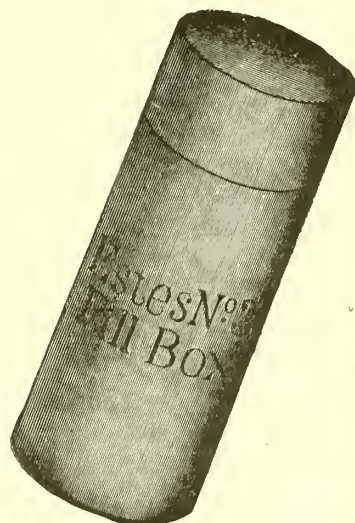
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SPECIAL LISTS ON APPLICATION.

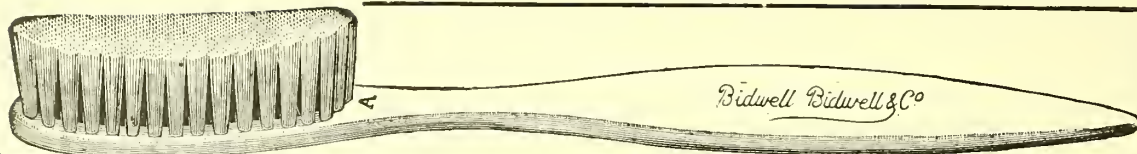
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NO LOOSE HAIRS.

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**STIPENDUM
CORK
STOPPERS**

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THE BEST FOR FACE AND TOOTH POWDERS,
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THE WORLD'S
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For GLASS
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INVALUABLE IN
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MENDS EVERYTHING.

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INEXPENSIVE

SELF-FIXING

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Showing how SEMREH CAPS are applied. The loose wet cap is merely slipped over the stopper, sprinkler or cork. No shaping or tying down required; in fact, it is so simple a boy can do it. Pharmacists in all parts of the country are using this time and labour-saving method.

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Showing how the SEMREH CAP fits itself to the stopper making an AIR-TIGHT SPIRIT-PROOF seal, stronger, of better appearance and much more efficient than skin, pleated paper, &c. Inexpensive, too, being complete in itself, and requiring no outlay on extras, such as string, adhesive or elastic.

By all Pharmacists admitted to be far superior to pleated paper or leather, in short
THE BEST CAPPING
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Fully illustrated booklet, explaining everything, and showing specimen capped bottles, sent on request.

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BOTTLE CAPPINGS

TINFOIL
ALL DESCRIPTIONS
COLLAPSIBLE TUBES
 PLAIN OR COLOURED
METAL BOTTLE CAPSULES,
 any size, colour or stamping.
ALL BRITISH MADE

Send specification of your requirements, or samples of what you are using, stating quantities, and we will give you **BEST QUALITY, BEST DELIVERY, BEST PRICES.**

LARGEST MAKERS IN THE WORLD

CHIEF OFFICE:

BETTS & CO., LTD. 1 WHARF ROAD,
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**COLLAPSIBLE
 TUBES**

Of all sizes in Pure Tin, Lead-coated with Tin and Pure Lead.

The Productions of Venesta Ltd. have a reputation for durability, finish and quality.

To cope with the Trade which will inevitably be offered to Britain, we have a very extensive plant for the production of **Collapsible Tubes**, etc. We are therefore able to give **your order**, however large or however small, immediate attention.

We invite your inquiries for **Collapsible Tubes**, **Screw Caps** for Pomade and other bottles, **Metal-lip Salve Tubes**, **Pure Tin Foil**, **Mixed and Tobacco Foils**, and shall be pleased to send you samples and current prices.

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MANUFACTURERS—NOT AGENTS.

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Write
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Samples

BRITISH

No. 77

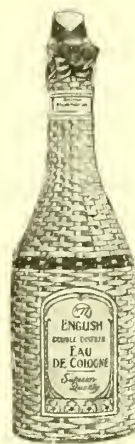
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In Square
Bottles.

2 oz., 9/- doz.
4 oz., 17/- „
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½ pint, 28/- doz.
1 pint, 55/- „
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Special
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In Pocket
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Full List of Packed Toilet Specialities sent on application.

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Field's Select Preparations.

MESSRS. C. R. HARKER, STAGG & MORGAN, LIMITED, wish to remind pharmacists that for many years they have had the sole right to manufacture Field's well-known and highly esteemed pharmaceutical preparations. Being made with selected drugs and by the original processes improved on modern lines, these preparations well deserve their high reputation and are recommended as the finest that can be manufactured.

**Inf. Gent. Co. Conc. Field's
Inf. Senegæ Conc., Field's**

**Syrup Ficorum Co., Field's
Liquor Sennæ Dulc., Field's, &c.**

SPECIAL PRICE LIST ON APPLICATION.

The H.S.M. Alcohol Recovery Still

(Patent, F. C. J. Bird).

The best and most convenient apparatus for the recovery of spirit from Tincture Marcs, Essence Residues, &c. Recovers the whole of the spirit at full strength. Now used by all the leading Wholesale Drug Houses and Mineral Water Essence Makers, &c.

The apparatus is made in several sizes suitable for either Retail Chemists, Wholesale Druggists, or the largest manufacturers. Saves its cost in a few months. Booklet and full particulars on application.

We are Special Manufacturers of

HAIR DYES (Laurence's)
STANDARDISED GALENICALS
AMYLIC ALCOHOL (for Milk Analysis)
HYDROCYANIC ACID, B.P.
COD LIVER OIL EMULSION
PETROLEUM EMULSION
SPIRIT OF SWEET NITRE
DURAPEDE (for the Feet)
AROMATIC SPIRIT OF AMMONIA
CASCARA PREPARATIONS
TEREBENE
CONCENTRATED LIQUORS FOR
TINCTURES, INFUSIONS & SYRUPS
MERCURIAL OINTMENT
NITROUS ELIXIR
BEEF AND MALT WINE
LIQUID ANNATTO
VITALACTINE (the ideal tonic casein
food—Sanatogen substitute)
ARKOL (a special petroleum laxative
oil of the highest purity)
ARKOLAX (a pleasantly flavoured
laxative confection)
BUTTER COLOUR
PHYSIOLOGICALLY
STANDARDISED PREPARATIONS

AN ALL-BRITISH DISINFECTANT.

ARKRYL



(Lysol substitute)



Of high germicidal efficiency for Surgical and general uses. Forms a clear solution with water, is non-corrosive and far less poisonous than carbolic acid.

PRICES.

4 oz. each.	8 oz. each.	16 oz. each.	32 oz. Bots. each.	1 gall. Tins.
Retail 7½d.	1/-	1/9	3/-	12/6 each
doz.	doz.	doz.	doz.	
Trade 4/9	8/-	13/6	24/-	8/6 , net

TWO NEW HAIR PREPARATIONS ARE

"Butilox" Hair Tonic

for strengthening the Hair, stimulating its growth, and rendering it soft, supple and lustrous, AND

"Butilox" Hair Renovator

for preventing greyness, and gradually restoring the colour of the Hair.

LITERATURE AND PRICES ON APPLICATION.

We are Special Manufacturers of

CHEMICAL SYRUPS
ESSENCES AND COLOURS FOR
CONFECTIONERY
FRUIT ESSENCES
MILLED OINTMENTS
POWDERS (Ground in our own Mills)
FIELD'S PERFECTED SYRUP
OF FIGS
VETERINARY SPICES
COMPOUND LIQUORICE POWDER
RAT VIRUS
GELATINE-COATED HORSE-BALLS
CASCARLAX (a palatable and active
fluid Cascara)
&c. &c.

Our Illustrated List of Packed Specialties,

Pharmaceutical and Toilet Preparations, put up for retail sale with customer's name and address, we shall be pleased to forward on application.

C. R. HARKER, STAGG & MORGAN, LTD.

OUR TRADE MARK.



C.R.H.S.&M.

*Wholesale and Export Druggists,
Distillers of Essential Oils,*

**DEVON WHARF
and
BELL WHARF,**

*Manufacturing and
Analytical Chemists,*

**Emmott Street,
MILE END,
LONDON, E.**

Telegraphic and Cable Address:
"EDULCINE LONDON."

Telephone Nos.:
215 EAST. 1025 EAST.

Codes:
A B C, 5th EDITION, AND PRIVATE.

Laurence's HAIR DYES

(ONE SOLUTION)

ARE STILL THE BEST AND MOST RELIABLE IN THE WORLD.



Facsimile of Package.

Everyone looking back at the past year 1914 will see it in their mind's eye as two very distinct and separate periods of six months each. The first, of course, passed under the normal peaceful conditions we are all used to. The unprecedented events of the latter period stand out too vividly to need recall. To the business man especially it was a year in two halves. We fear that for all too many businesses the latter half of 1914 proved the reverse of prosperous.

It is all the more gratifying to be able to record that the sales of LAURENCE'S HAIR DYES for 1914 have fully maintained their normal

expansion and growth.

Under the conditions prevailing, we venture to think this a proof beyond doubt of the firm and secure establishment of LAURENCE'S HAIR DYES in the favour of the Public. The policy of a really reliable article with an adequate profit to the distributor has been completely vindicated.

Particulars of our popular bonus terms, P.A.T.A. prices, etc., will be found below.

Purchasers of not less than Six dozen bottles, which may be assorted as to sizes and colours, in addition to our Bonus of eight bottles, will receive free of charge materials for creating a striking and attractive window display.

The net profit obtainable by the sale of six dozen bottles and bonus (1/6 size) is £3 8s. 8d.

Prices and profits protected by P. A. T. A.



Facsimile of Showcard.

Size.	Minimum retail.	Minimum wholesale.	
1/-	1/-	7/6	} per doz. less 5% discount.
1/6	1/6	9/-	
2/6	2/3	15/-	
3/6	3/3	21/-	

SPECIAL BONUS.

Buyers of 3 doz. bottles receive 3 bottles gratis (may be assorted any size).

Do. 6 doz. do. 8 bottles gratis.

Do. 12 doz. do. 18 bottles gratis.

Equivalent in the case of the size in most general demand—viz., 1/6 size, to 4/6, 12/- and 27/- respectively.

You cannot do better than to let us put a window display order in hand for you. Please ask at the same time for full particulars of the Prizes we are offering for the best Displays made during the year.

Sole Proprietors:

C. R. HARKER, STAGG & MORGAN

(Limited),

DEVON WHARF, Emmott St., Mile End, LONDON, E.

Henry C. Quelch & Co.

4 & 5 LUDGATE SQUARE,
LONDON :: :: E.C.

ARE AGENTS FOR

ANTISEPTIC FILE CO. {

DUN'S CAPSULES <all kinds>.

JAVA POWDER <BOURJOIS>.

PAPIER POUDRÉ :: ::

SWANDOWN FACE
POWDER <TETLOW'S>.

:: "SYRACUSE" ::

SUSPENSORY BANDAGES.

S. & H. CORN FILES, 3/9 doz.

STANDARD PUMICE, 2/6 doz.

TOILET PUMICE 4/6 doz.

"TOP-NOT" PREPARATIONS.

NEAR, KID & BEAUDRUCHE
<CAPPING SKINS>

ICY-HOT VACUUM FLASKS.

PETAL DUST. :: ::

CLAIRE'S GREASE PAINTS.

&c. &c' &c. :: ::

WRITE FOR LISTS & send your orders direct to us. & we will look after your interests

We are Packers of all kinds of Toilet Goods

BRILLIANTINES. :: ::

TOILET PARAFFIN.

LIME CREAM. LIP SALVE.

NAIL STONES. NAIL STICKS.

EYEBROW PENCILS.

EAU DE COLOGNE, No. 250.

SCARLETBRANDEau de Cologne.

EAU DE PROVENCE.

&c. &c. &c.

BAY RUM. BATH SALT.

SMELLING SALTS.

BATH & TOILET POWDERS.

LAVENDER WATER.

PERFUMES OF ALL KINDS.

SHAVING STICKS.

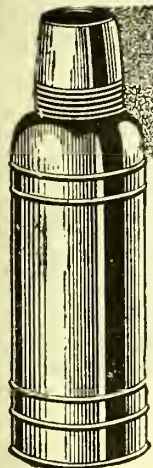
COLD CREAM. :: ::

GLYCERINE & CUCUMBER.

The Labels and Styles of our goods are most attractive. If our Representatives are not calling on you, please let us know and we will submit samples.

Foreign Buyers are specially requested to indent to us.

FOR IMMEDIATE DELIVERY.



ICY-HOT

BOTTLES

VACUUM FLASKS

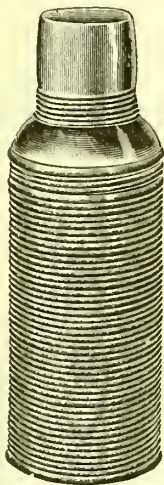
WE GUARANTEE that these bottles are
made in America by American Workmen.

NOT AFFILIATED WITH ANY GERMAN COMPANY.



No. 23
Imitation Leather
Enamelled on Metal

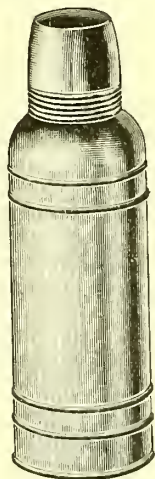
Retail 4/6
43 -



PINT SIZE.

No. 22
Corrugated
Nickel Plated

8/6
78 -



No. 44
Best Plain
Nickel Plated

10/6 each
90 - doz.



No. 63
Imitation Leather
Enamelled on Metal

Retail 9/6
87 -



QUART SIZE.

No. 62
Corrugated
Nickel Plated

12/6
108 -



No. 88
Best Plain
Nickel Plated

15/6 each
132 - doz.

KHAKI-COLOURED Canvas Holders
WITH SLING.

PINT SIZE, 12/- doz. QUART SIZE, 24/- doz.

ALL BOTTLES EQUALLY GUARANTEED TO
Keep Hot things Hot - 30 Hours.
Keep Cold things Cold - 3 Days.

REFILLS: Pints, 36/- doz.;

Quarts, 72/- doz.

SPARE CORKS: " 1/6 "

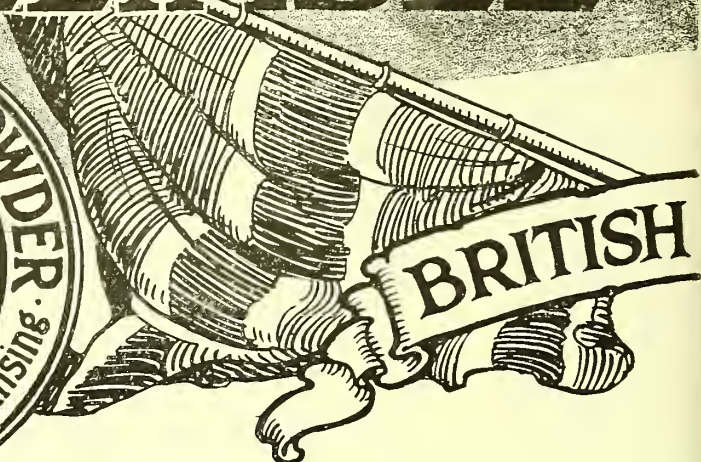
" 2 - "

SOLE AGENTS: "

HENRY C. QUELCH & CO., 4 & 5 Ludgate Square,
LONDON, E.C.

Or through all Wholesale London and Provincial Houses.

AS RELIABLE



The 100% Guaranteed Profit Line!

Now, if ever, is the time to watch your profits. Why be satisfied with the "not-worth-while" profits of most tooth powders, when each sale of EUCRYL TOOTH POWDER—firsts and repeats—shows you a **guaranteed profit** on cost of 100%, P.A.T.A.?

EUCRYL

TOOTH POWDER

Our Bonus Offer.—Send an opening order, using the coupon on the next page, for three dozen, and we will include one dozen 6d. tins extra and free of charge. (This offer of one dozen 6d. tins free also applies to all repeat orders of six dozen at 3/6 per dozen net, carriage paid.) Free samples, showcards, advertising matter—Selling helps—supplied with every order for "The Dentifrice paying 100% Profit!"

EUCRYL LTD., 61/63 Lant Street, Southwark, S.E.

USE THIS COUPON

AS THE FLAG

MADE



Another Line as good as EUCRYL

The fact that LYCRYL, the new All-British Sterilising Fluid, is an Eucryl-made product guarantees you two things—Big and Profitable Sales, your customers' approval and their repeat orders.

In place of the enemy's article, handle and recommend—

LYCRYL

(Liq. Cres. Sap.)

The Sterilising Fluid with merit.

It sells at sight without explanation, and is guaranteed to meet the requirements of the most critical surgeon or nurse.

PRICES :

			P.A.T.A.
4 oz. bottle (with metal measuring cup)	5/-	dozen.	7½ d.
8 oz. "	8/-	"	1/-
16 oz. "	14/-	"	1/9
32 oz. "	26/-	"	3/-

Also in 1 gallon jars.

Special Bonus Terms on Application.

ORDER COUPON.

EUCRYL, LIMITED,
61/63 Lant St., Southwark, S.E.

Please forward three dozen 6d. size Eucryl Tooth Powder at 3s. 6d. per dozen net, carriage paid, with bonus as offered.

Name

Address

"C. & D."

TO-DAY



THE PICTURE TELLS THE SECRET

We can claim with justice to be the Pioneers of the "Complete Testing Sample" system.

Every supply is sufficient to prove the real value of our preparations, so that each of the thousands of applicants is a prospective purchaser.

Be Prepared!

of the amazing popularity of Edwards' "Harlene" Co.'s Perfect Hair-growing and Toilet Preparations.

It is a fact that after 30 years' business we are doing better than ever—striking vindication of the value of our specialities and of the sample system as a means of securing the confidence of the public.

WE HAVE SPENT THOUSANDS

of pounds on sending out Free "Hair-drill" and "Astol" Outfits, but it has all come back—because people find our preparations are what we claim.

YOU SHOULD BENEFIT

by direct sales. What about your stock? If you can serve a customer once, be sure he or she will come again.

QUICK SELLERS. ——— WIDELY ADVERTISED.

**"HARLENE" HAIR TONIC. "UZON" BRILLIANTINE.
"CREMEX" SHAMPOO POWDERS.
"ASTOL" HAIR-COLOUR RESTORER.
"ASTINE" VANISHING CREAM,
and other "ASTINE" Preparations**

A P.C. will bring our Price List, together with Dummies, Showcards, Counter Bills, etc.

**EDWARDS' "HARLENE" CO.,
20-26 LAMB'S CONDUIT ST., LONDON, W.C.**

DEARBORN Limited

32-34 Theobald's Road, LONDON, W.C.

Toilet Specialties

		Price per Doz. to Retailer.	Selling Price. P.A.T.A.
PILENTA SOAP	- - a complexion soap	10/-	1/-
PROLACTUM	- - for the lips	10/-	1/-
PARSIDIUM JELLY	- - for wrinkles	10/-	1/-
ALLACITE OF ORANGE BLOSSOM	} a dressing cream	22/6	2/6
BORANIUM	- - a hair tonic	22/6	2/6
CLEMINITE	- - for a face lotion	22/6	2/6
COLLIANDUM	- - for a face tint	22/6	2/6
ONALITE	- - a foot powder	22/6	2/6
PERGOL	- - a deodorant	22/6	2/6
STALLAX	- - for a shampoo	22/6	2/6
JETTALINE	- - for clearing the skin	31/6	3/6
PHEMINOL	- - a depilatory	36/-	4/-
MENNALINE	- - for the eyelashes	36/-	4/-
MERCOLIZED WAX	- - a face cream	31/6	3/6
STYMOL	- - { for oily complexions and blackheads }	36/-	4 /
BARSYDE	- - dandruff eradicator	22/6	2/6
TAMMALITE	- - for grey and faded hair	22/6	2/6
LIQUID PERGOL	- - { to check excessive per- spiration locally }	31/6	3/6
BICROLIUM	- - for whitening the hands	22/6	2/6

STOCKED BY ALL WHOLESALERS HOUSES.

COLONIAL DEPOTS AND AGENCIES.

AUSTRALIA.

ALL WHOLESALERS,
and
DEARBORN, Ltd.,
Grace House,
Clarence St.,
Sydney.

SOUTH AFRICA.

LENNON & CO., Ltd. (Cape Town).
SIEVE BROS. & KARNOVSKY
(Johannesburg).

INDIA.

KEMP & CO., Ltd. (Bombay).
SMITH, STANNISTREET & CO.
(Calcutta).

NEW ZEALAND.

SHARLAND & CO., Ltd.
(Auckland and Wellington).

Methylated Spirit

*White in colour & exceptionally
free from unpleasantness.*

Spirits of Wine

*All strengths. Absolute Alcohol.
Duty paid.
Duty free for Export and
Scientific purposes.
Try the "Extra Rectified"
for your Perfumery.*

Absolute Alcohol

Home and Export.

Chemists' Wines

*Sherry, Port, Coca,
Malt and Meat, Orange.
Orange and Quinine,
Maintains its brilliancy permanently.
Champagnes.*

RED CROSS SCOTCH WHISKY.

RED CROSS BRANDY.

Write for Samples and Quotations.

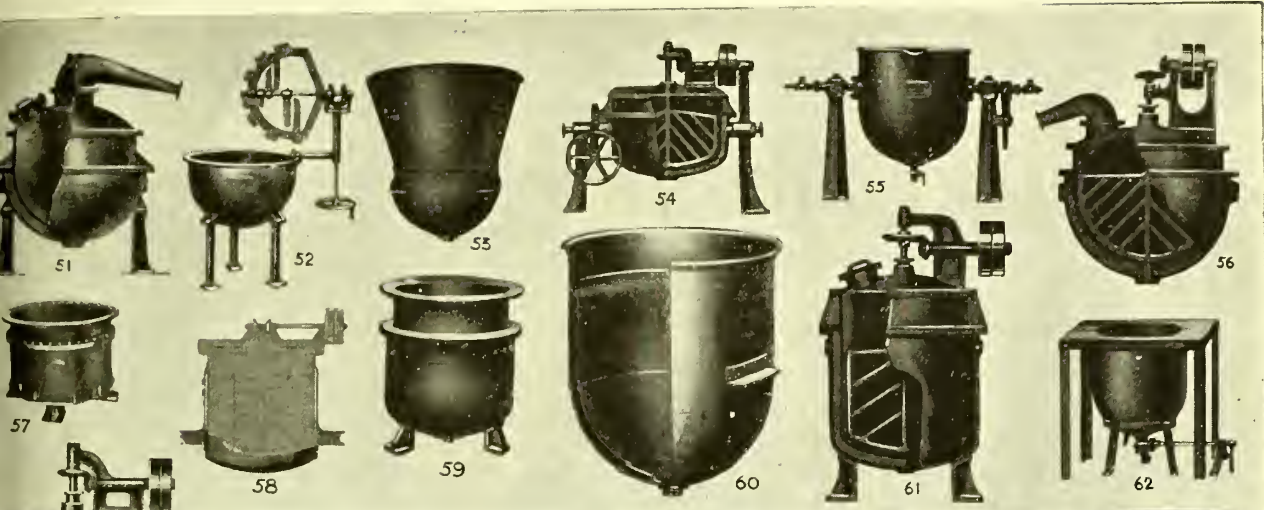
Jas. Burrough Ltd.

D1 Cale Distillery Hutton Road LAMBETH S.E.

Telegrams: "BURROCALE, LAMB, LONDON."

Telephone: HOP 3436 (2 lines)

Established at Chelsea 1820.



ESTABLISHED 1848 **E. FORSHAW & SON LTD** TEL. 123.
SOAP AND CHEMICAL PLANT MAKERS,
WARRINGTON, ENGLAND.



SOAP & CHEMICAL BOILING PANS
STEAM JACKETED PANS
MIXING PANS
EVAPORATORS, STILL &
AND EVERY DESCRIPTION OF
SOAP AND CHEMICAL PLANT.



COMPRESSED TABLETS.

The F. J. Stokes Machine Co.'s

CLARKE ROTARY TABLET MACHINE

IS THE MACHINE FOR EVERY MANUFACTURER

ALL THE LEADING MANUFACTURERS IN ENGLAND AND AMERICA USE THESE MACHINES

Unquestionably the most perfect Rotary Tablet Machine ever invented.



All tablets perfect in finish and no variation in weight.



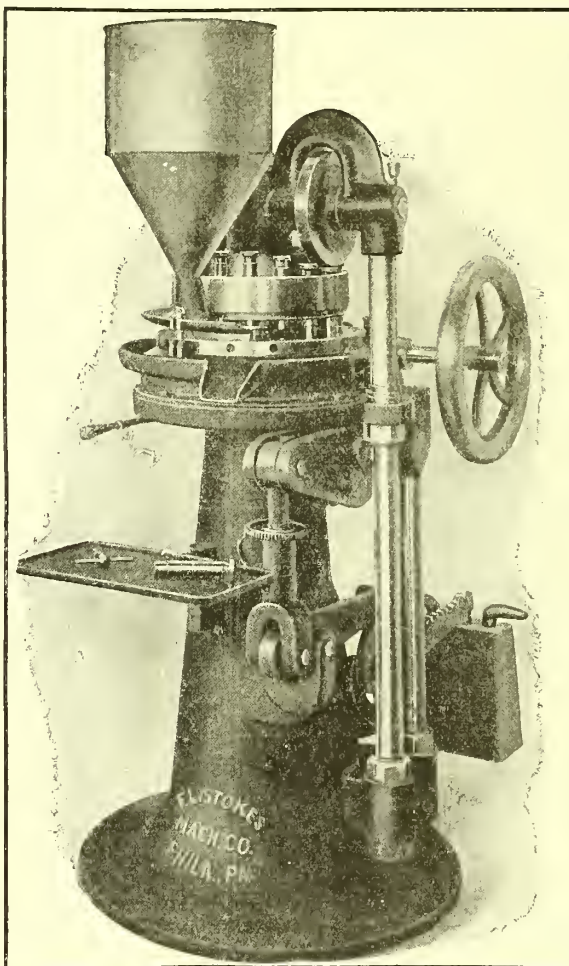
Noiseless in operation and no shaking or vibration.



All adjustments can be made by hand whilst the machine is running; there is no need for Spanners.



Send a Postcard for Full Particulars and Prices.



Made in three types as follows:

MODELS B and BB. will compress any size tablet up to $\frac{1}{2}$ in. diameter at a speed of 500 and 1500 per minute respectively.

MODEL D is suitable for compressing up to 1 in. diameter at the rate of 250 per minute.



More economical than single-punch machines.



These Rotary Machines are so positive in operation that constant attention is not necessary, one operator being able to handle several machines.

SPECIAL NOTE: All Machines of this type are fitted with safety weights which automatically release excessive pressure, and prevent broken punches.

These machines can be seen in operation at the premises of the Sole Agents:

THOMPSON & CAPPER, LTD.,
Manesty Buildings, College Lane, LIVERPOOL.

DETAILED PAMPHLETS WILL BE POSTED ON REQUEST.

Telegrams: "Sanitas Liverpool."

Established 1843.

Telephone: Royal 2093.

THE PROJECTOSCOPE

Electric Pavement Sign Projector

Your
Advertisement
on Pavement,
Wall or
Window Blind

No One
who looks
where he
walks
can miss
the Sign



FREE ADVERTISING SPACE

Nothing complicated—
nothing expensive—
nothing to get out of
order. It's just a little
tube containing a
powerful little lamp,
lenses and a stencil.
It operates with any
ordinary electric supply
and costs approxi-
mately a halfpenny an
hour to operate.

Send a P.C. for full particulars
to SOLE AGENTS:

THOMPSON & CAPPER, LTD.

Manesty Buildings,

College Lane, LIVERPOOL.

TELEPHONE : : : 2093 ROYAL.
TELEGRAMS: "SANITAS LIVERPOOL."
CODE: A B C, 5TH EDITION.
Established 1843.



Just think what it means!

An Advertisement on the pavement where every-
body can see it, practically FREE OF CHARGE.
You can change the Advertisement as often as you
wish; it is changed as easily as a lantern slide.

TABLET MACHINERY

In 7 different sizes.

Great improvements have recently been made in these machines, by which the output has been largely increased.

The strongest, simplest and most efficient Tablet Machines on the market.

GELATINE CAPSULE MACHINES for Hand or Power, for producing both types of Capsules filled with either liquid, paste or powder.



The famous "SPEEDY"
Ointment Mill.

GELATINE
PILL-COATING
MACHINE.

EMULSIFIERS and all
kinds of
PHARMACEUTICAL
MACHINERY.

S. W. WILKINSON & CO., PHARMACEUTICAL
ENGINEERS.
Little Holme Street, LEICESTER.

FORGROVE WRAPPING MACHINES

Note what users say :

Dear Sirs,

With reference to the instalment of SEVEN "PEPS" WRAPPING, COUNTING, AND PACKING MACHINES which you have recently completed, we have pleasure in notifying you that these are giving every satisfaction, turning out the work in a way in which we hardly anticipated would have been possible when you undertook the responsibility of designing these.

Yours truly,
C. E. FULFORD, Limited.

Dear Sirs,

I have pleasure in enclosing cheque to cover your statement for the Tablet-filling Machine. When your representative was here it ran perfectly, and as soon as we can standardise our bottles I think we shall have the best Tablet-filling Machine on the market.

I will order another one later on when I see exactly what I require.

I take this opportunity of thanking you for the care you took and the time you spent over the matter.

Yours faithfully,

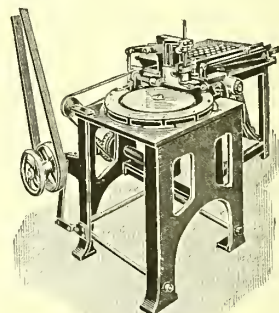
THE VENO DRUG CO., Ltd.

THIS
Forgrove Machine wraps Round Medicated Tablets
100 TO 120 PER MINUTE OUTPUT.

Machines for Counting and Filling Tablets and Pills
INTO BOTTLES AND OTHER RECEPTACLES.

We make Machines for wrapping soap, cube blue, meat cubes, chocolate, cocoa blocks, caramels, and Machines for Twist Wrapping.

THE FORGROVE MACHINERY CO. Ltd.,
Admiral Street, Dewsbury Road, LEEDS.



BENNETT, SONS & SHEARS,

43 & 44 Shoe Lane, LONDON, E.C.

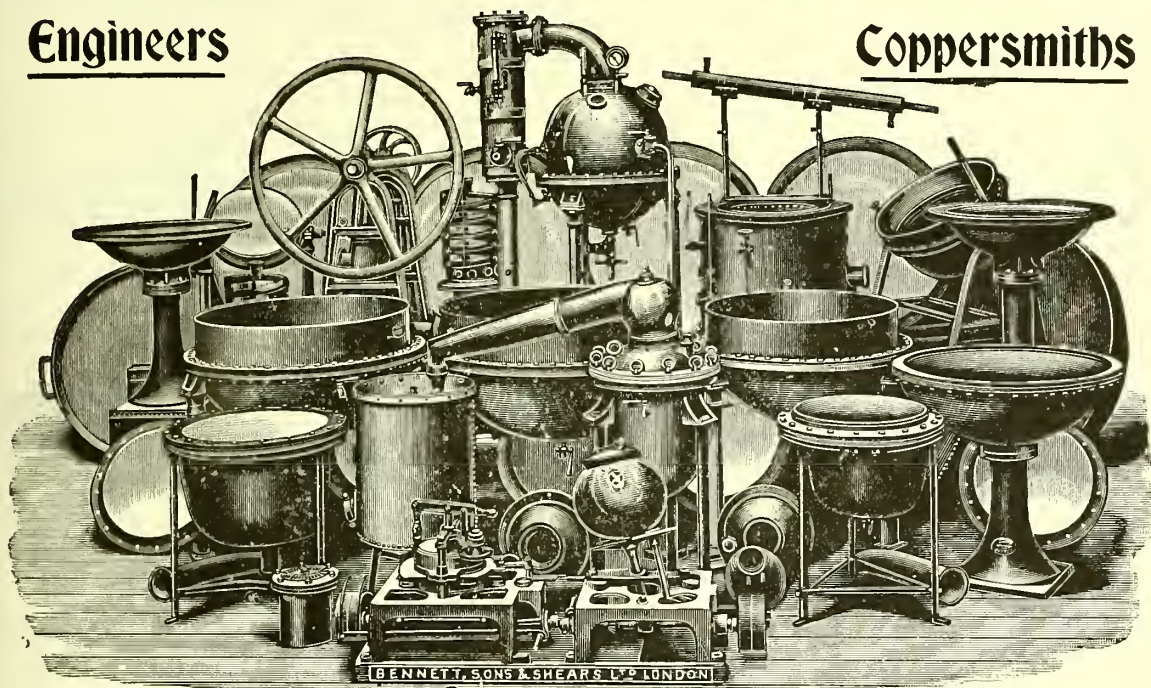
Ltd.

Works - - HAY MILLS, BIRMINGHAM.

**Makers of Plant for Manufacturers
of Crude and Fine Chemicals.**

Engineers

Coppersmiths



PATENTED SPECIALITIES.

**BENNETT'S PATENT "IDEAL" ANNULAR CONDENSER
BUCKLEY'S PATENT TABLET COMPRESSING MACHINERY
SHEARS' PATENT MULSER FOR PERFECTING EMULSIONS**

PLANT for making PURE Chemicals.

CATALOGUES SENT ON APPLICATION.

A FEW of the MANY PATTERNS of GARDNER'S PATENT "RAPID" SIFTERS & MIXERS.

Used for everything "SIFTABLE" or everything "MIXABLE."

STANDARD PATTERN combined Machines (Figs. 1 to 4) will at one operation thoroughly Sift and Mix all Dry Powders, and reduce to powder and sift any that contain lumps. Largely used for **Drugs, Chemicals, Acids, Baking Powder, Self-raising Flour, Cattle Foods, Sugar, Colours, Sherbet, Coffee, Flour-blending, Disinfectants, and all kinds of Medicated Powders.**

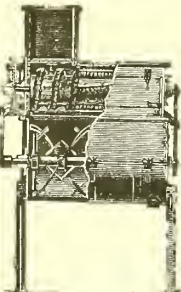


Fig. 1.
Sizes for Hand Use.

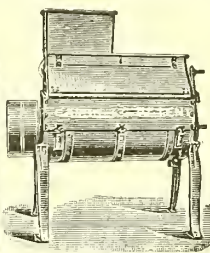


Fig. 2.
Power Sizes with
Pulleys.

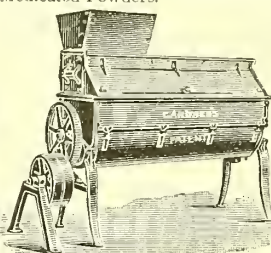


Fig. 3.
Pulley and Gear Drive.
The type recommended
for Power users.

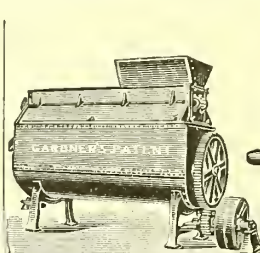


Fig. 4.
Large Capacity Power-
driven Machines.

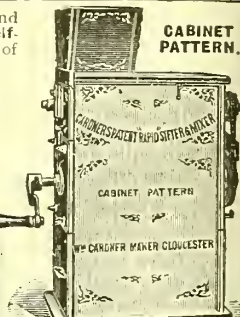
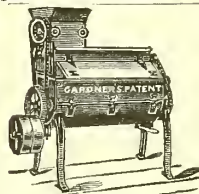
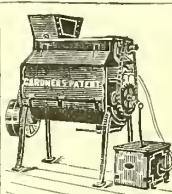


Fig. 5.
For Counter use and
small quantities.



GARDNER'S Patent "RAPID"
SIFTER,
MIXER, AND CRUSHER.
Fig. 6.

For breaking down large and hard lumps in Sugar, Acids, Chicory, Salt, Colours, Soda, small enough to be reduced, sifted, and mixed afterwards.



GARDNER'S Patent "RAPID"
SIFTER, MIXER,
AND ESSENCE SPRAYER.
Fig. 7.

For adding Liquids, Essences, Flavours, Liquid Colours, Oils, &c., to Sugar, Acids, Flour, Face Powders, Disinfectants, Seasonings, and many kinds of Powders and Crystals during Mixing.



Fig. 8.
Open Bottom Pattern.

GARDNER'S Patent "RAPID" SIFTERS (Figs. 8 to 12) (Power Sizes) sift any kind of Dry Powders, and reduce to powder any that may be lumpy, such as Tartaric Acid, Bicarbonate of Soda, Magnesia, Arrowroot, Sugar, Flour, Colours, Sheep Dip, &c.



Fig. 9.

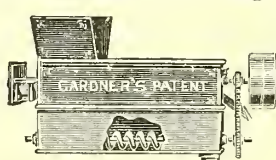


Fig. 10.

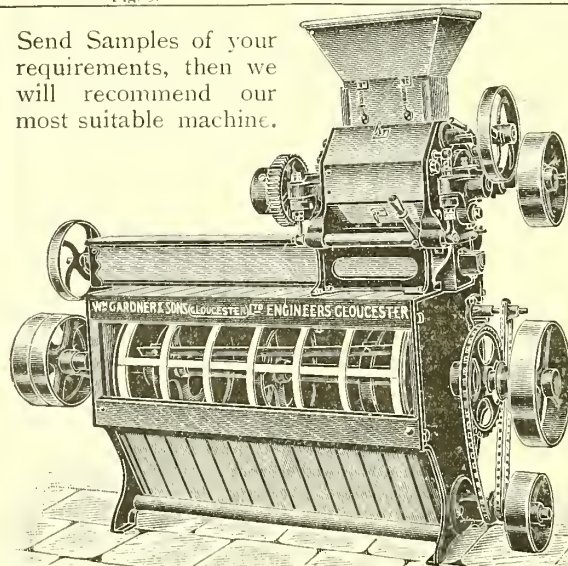


Fig. 11.



Fig. 12.

Send Samples of your requirements, then we will recommend our most suitable machine.



This is one form of GARDNER'S PATENT GRINDING AND DRESSING MACHINE.

For Sugars, Invalids' and Infants' Foods, Paint Colours, Crystals, Drugs, &c.

We make these Mills for Sugar capacity from $\frac{1}{2}$ cwt. per hour upwards, and any grade of Iceing and Castors can be obtained at one operation.

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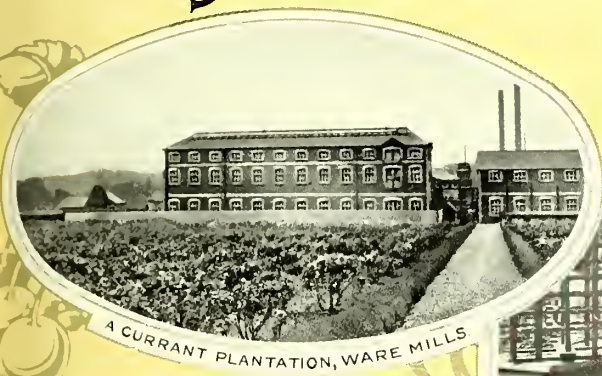
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Supplied in decorated tins.

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Extract of Malt with Cod Liver Oil

Packed in amber-tinted glass jars,
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FIG.1825.C

FIG.1775.

FIG.1577

FIG.4840

FIG.1820

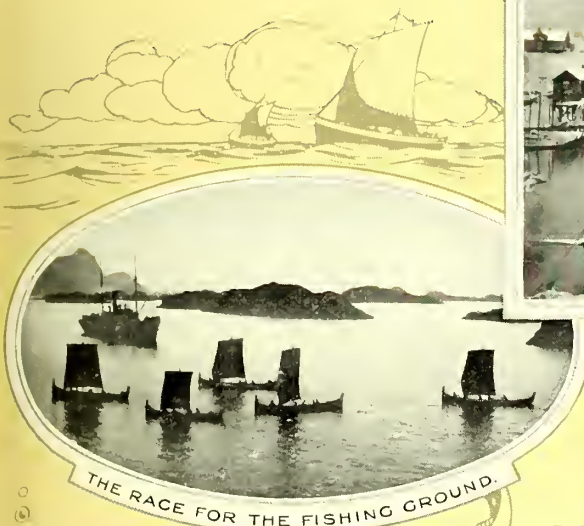
FIG.474.

FIG.1776.

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Also supplied in ovals and dispensing flats.

Eucalyptus Oil, B.P.

Packed in Wood's white glass flats.

1 oz. 3/6; 2 oz. 6/-; 4 oz. 10/- per doz.

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Packed in Wood's panelled flats.

2 oz. 2/8; 4 oz. 4/- per doz.

Special quotations to Buyers of 1 gross lots and upwards.

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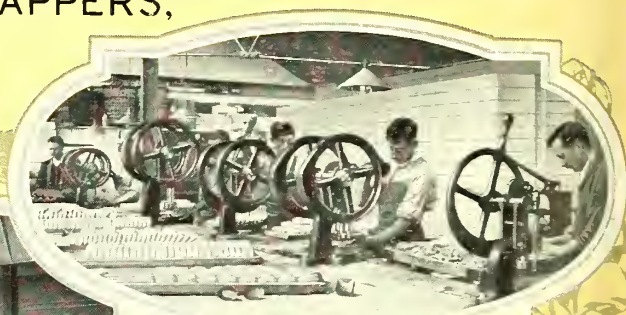
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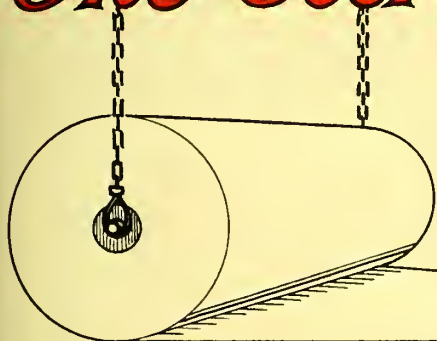


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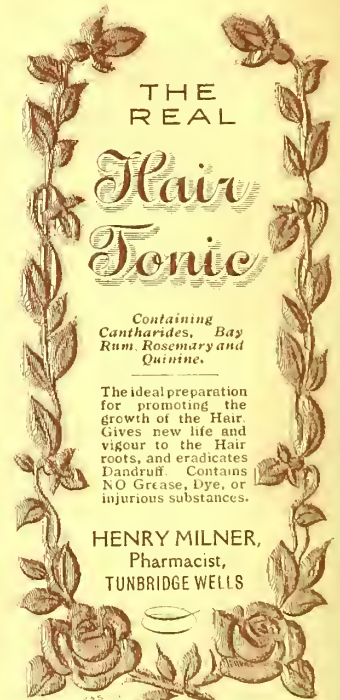
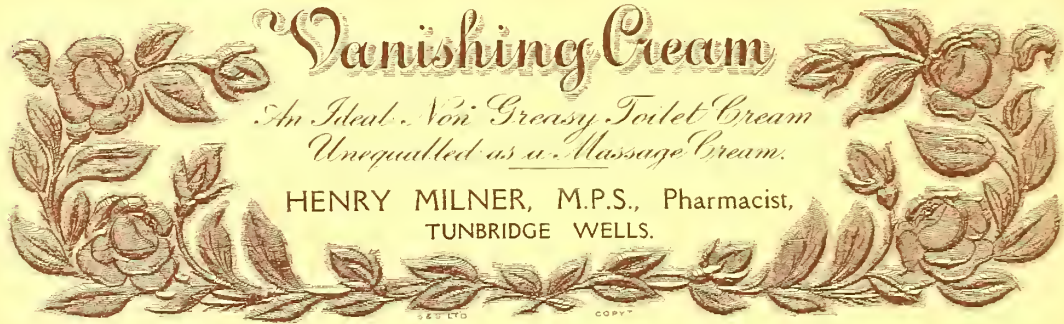
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For Chalk, Whiting, Limestone, Marble, &c.

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SPECIALLY MADE FOR THE PRODUCTION OF
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≡ ADVANTAGES ≡

No alteration of Plant necessary.

Great Economy of Time and Labour is effected.

Great Cleanliness in Manufacturing is ensured.

The same Generator will yield **THREE TIMES** the amount of Carbonic Acid Gas per Charge.

The same quantity of Sulphuric Acid will yield **TWICE THE AMOUNT** of Carbonic Acid Gas.

There is **NO SEDIMENT** in the Residual Liquors, and consequently no Mud to deal with.

A Marketable Bye-Product (Glauber Salts) can, if desired, be obtained.

First-class Waters are produced.

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LIMITED, NORTHWICH.

INSTRUCTIONS FOR USING Bicarbonate of Soda in making Mineral Waters

PRODUCTION OF CARBONIC ACID GAS.

PROPORTIONS TO BE USED:

1 Cwt. Bicarbonate.

Minimum quantity of Water: 17 to 20 Gallons.

3½ Gallons (say 68 lbs.) Sulphuric Acid of 167 Twaddell.

These quantities give about 58 lbs. Pure Carbonic Acid Gas.

THE METHOD OF CHARGING the Generator, and of running in the Acid, is exactly the same as when Whiting, Chalk, &c., are used; no agitation is required except at the very end of the charge. About 50% more bottles (or half as many again) will be charged than with the same weight of Whiting.

A Generator capable of holding 1 cwt. of Whiting, 36 gallons of Water and 6½ gallons (1 cwt.) of Acid can be charged with 2 cwts. of Bicarb., 34 gallons of Water and 7½ gallons (1½ cwt.) of Acid. This will yield **Three Times as much Carbonic Acid Gas** as is given by the Whiting process, and consequently three times as many bottles per charge—an immense advantage where space is limited and when business is brisk.

It will be seen from the proportions given above that only about *two-fifths* of the Acid and two-thirds of Bicarbonate (weight for weight, as compared with Whiting) are required to produce the same amount of Carbonic Acid Gas.

The proportion of Water can be varied according to circumstances. With the above proportions the liquor from the Generator (which liquor is always perfectly clear and free from sediment) will, if run into tubs or into crystallising pans, crystallise in about two hours at ordinary temperatures. The Crystals obtained are Glauber Salts, a readily saleable article in place of the mud from Whiting, so disagreeable to handle and so difficult to get rid of.

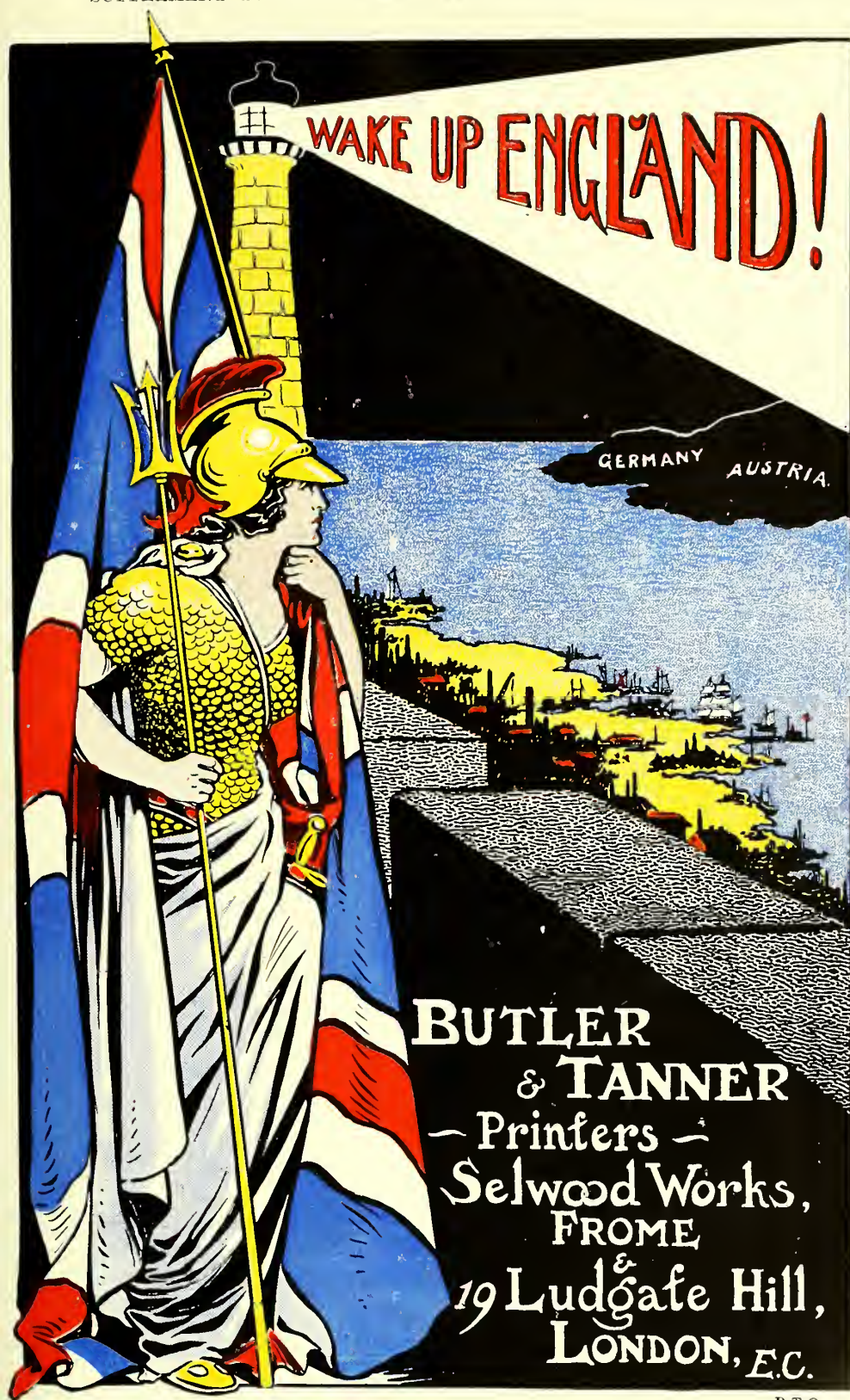
When the minimum quantity of Water is used, the liquor should not be allowed to stand in the Generator after work is finished, or the Glauber Salts will crystallise in it and cause delay by having to be dissolved out with water, or otherwise removed, before a fresh charge can be inserted. If it is not wished to recover the Glauber Salts, fill up the Generator with water after the charge is worked off, or work with more water in the original charge.

If the residual liquors are disposed of by pouring them down a drain, it is advisable first to dilute them with water, or to pour water down the drain, either at the same time as or immediately after, the liquors, in order to prevent a possible blockage of the drain-pipe by crystallisation.

Mineral Water Manufacturers who use the above process might, with advantage, send their Glauber Salts to the firms who supply them with their Acid.

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Pure English Filtering Papers.



633 E

633 D

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633 A

633 B

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FOREIGN MAKES UNOBTAINABLE DURING THE WAR.

Appended is a copy of the Report from The National Physical
Laboratory, Teddington, to whom samples were submitted for
examination and comparison with the best Foreign Papers.

PLEASE ORDER THROUGH YOUR WHOLESALE HOUSE.

COPY OF REPORT

On six samples of Filter Paper sent in by Messrs. Evans, Adlard & Co., Ltd.

Five samples of white filter paper in sheets and cut circles were sent, and one sample of thin grey filtering paper in cut circles. The first five were of various kinds, suitable for different purposes. The following tests have been undertaken, determination of Ash and of its constancy for each kind of paper, rate of filtration, and the ability to retain very finely divided precipitates in those cases where the description of the paper indicated that it was designed for this purpose.

The following is a statement of the purposes for which the various grades of paper are intended.

1. No. 633a. Medium weight and suitable for rapid filtration.
2. No. 633b. Heavier weight.
3. No. 633c. Very similar to the above.
4. No. 633d. } Both suitable for retaining finely divided precipitates.
5. No. 633e. } No. 633e is a heavier paper, filtering more rapidly than 633d.

Determination of Ash.

A sheet of each paper measuring $24\frac{1}{2}'' \times 24\frac{1}{2}''$ was divided into two equal portions and carefully ignited. The results obtained in each case indicate that all the papers are very uniform in mineral content. The figures obtained for the ash of a sheet ($24\frac{1}{2}'' \times 24\frac{1}{2}''$) for each kind of paper are given in the table below.

Ash per sheet ($24\frac{1}{2}'' \times 24\frac{1}{2}''$)

No. 633a.	0.0518 gms.
No. 633b.	0.0564 „
No. 633c.	0.0524 „
No. 633d.	0.0548 „
No. 633e.	0.0934 „

The corresponding figures for the sizes of filter papers in most frequent use are given in the following table.

SIZE. Diameter in inches.	ASH IN GMS.					
	No. 633A.	No. 633B.	No. 633C.	No. 633D.	No. 633E.	Thin Grey.
$2\frac{1}{4}$	0.00034	0.00037	0.00035	0.00036	0.00062	0.00103
$2\frac{3}{4}$	0.00051	0.00056	0.00052	0.00054	0.00092	0.00154
$3\frac{1}{2}$	0.00083	0.00090	0.00084	0.00087	0.00149	0.00250
$4\frac{1}{4}$	0.00122	0.00133	0.00124	0.00129	0.00221	0.00368
5	0.00169	0.00184	0.00171	0.00179	0.00305	0.00510

Rate of Filtration.

The results of this test are very largely dependent on the method employed, and rates of filtration published by makers without stating the method are, therefore, useless for comparison. It was therefore considered advisable to obtain samples of a well-known make so that by using the same definite conditions for each kind of paper, a comparison with an article of known quality could be obtained.

The method adopted was to use a smooth funnel of 60° fitted with an accurately folded paper of 5" diameter. Water maintained at constant level, by an automatic arrangement, was allowed to flow through during the period of five minutes; by making a series of observations, an approximate figure for the rate of flow could be obtained. The figures were subject to somewhat wide variations, but as the conditions were the same for the papers submitted for test and for those of a similar kind of a well-known make, the results can be regarded as comparable.

The following figures were obtained.

	Approximate rate of flow through 5" paper in 5 minutes.	Similar grade from another maker.
No. 633a.	290 c.c.	240 c.c.
No. 633b.	390 c.c.	280 c.c.
No. 633c.	460 c.c.	460 c.c.
No. 633d.	200 c.c.	140 c.c.

Notes on the rates of Filtration.

No. 633b. The rates with this paper were particularly constant for both 633b. and the comparison paper.

No. 633d. The papers used with this grade were of 11 cm. as this was the largest size obtainable in the comparison paper of similar grade.

No. 633e. The rates with this paper were very variable in both cases but it is undoubtedly as rapid as the comparison paper.

Ability to retain fine precipitates.

A series of beakers containing equal volumes of a dilute sulphuric acid solution were taken, the contents raised to the boiling point, treated with barium chloride solution and after rapidly cooling filtered through papers of Nos. 633d. and 633e. and the corresponding grades of comparison paper. The filtrates were in each case perfectly clear and remained so on washing the precipitates remaining on the filter papers.

Another and more drastic test was carried out as follows :

Gm. quantities of an alloy containing 82% tin and 10% antimony were treated with nitric acid vaporated to dryness and then treated with 100 c.c. of 10% nitric acid, and boiled. Without allowing the turbid solutions to settle, they were immediately poured into funnels fitted with the moistened papers. When the solutions had all passed through, the precipitates were washed. It was noted that papers Nos. 633d. and 633e. gave very slightly opalescent solutions, but the amount passed was of such small proportions that on long continued standing no precipitate would settle.

In only one case was an absolutely clear filtrate obtained, viz., in the case of a comparison paper similar to 633d.

Speaking generally, no perceptible difference could be observed between the papers under test and those with which they were compared in their behaviour towards the solution containing one of the most difficult substances to filter met with in analytical practice. The amount of the oxides of tin and antimony so passed could be regarded as of no practical importance.

No. 633a. was examined for chlorides but none could be detected. All the papers examined compare very favourably with those of similar characters with which they have been compared, and in most particulars, surpass them.

The amount of ash is approximately half that contained in the comparison papers.

Conclusion.

The papers submitted appear to answer very fully the description indicated by the makers and to be suitable for all purposes of filtration where the use of a paper whose ash-content has been lowered by extraction with Hydrochloric and Hydrofluoric acids is not regarded as essential.

December 15th, 1914.

R. T. GLAZEBROOK,
Director.

Supplement to Report on Filter Papers submitted by Messrs. Evans, Adlard & Co.

The weights of ash for the different sizes of papers, not included in our previous report, are given in the appended table.

TABLE.

Diameter in inches.	No. 633A. Ash.	No. 633B. Ash.	No. 633C. Ash.	No. 633D. Ash.	No. 633E. Ash.	Grey. Ash.
3	0.00061	0.00066	0.00062	0.00064	0.00109	0.00183
3 $\frac{1}{4}$	0.00071	0.00078	0.00072	0.00076	0.00129	0.00215
3 $\frac{3}{4}$	0.00095	0.00104	0.00096	0.00101	0.00172	0.00263
4 $\frac{1}{2}$	0.00136	0.00148	0.00136	0.00144	0.00244	0.00412
5 $\frac{1}{2}$	0.00204	0.00220	0.00204	0.00216	0.00368	0.00616
6	0.00243	0.00266	0.00245	0.00257	0.00439	0.00735
7	0.0033	0.00360	0.0034	0.0035	0.0060	0.01020
7 $\frac{1}{4}$	0.0035	0.0039	0.0036	0.0037	0.0064	0.01070
7 $\frac{1}{2}$	0.0038	0.0042	0.0038	0.0040	0.0069	0.0115
8	0.0043	0.0047	0.0044	0.0045	0.0079	0.0131
9	0.0055	0.0060	0.0055	0.0058	0.0099	0.0165
9 $\frac{1}{2}$	0.0061	0.0067	0.0062	0.0065	0.0110	0.0184
10	0.0067	0.0074	0.0069	0.0072	0.0122	0.0204
11	0.0082	0.0089	0.0083	0.0087	0.0148	0.0244
12	0.0097	0.0104	0.0098	0.0103	0.0176	0.0294
12 $\frac{1}{2}$	0.0106	0.0115	0.0107	0.0112	0.0191	0.0319
13	0.0115	0.0125	0.0116	0.0121	0.0207	0.0345
13 $\frac{1}{2}$	0.0123	0.0134	0.0125	0.0131	0.0233	0.0372
15 $\frac{1}{2}$	0.0163	0.0177	0.0165	0.0173	0.0294	0.0490
17 $\frac{1}{2}$	0.0207	0.0226	0.0210	0.0219	0.0374	0.0626
18	0.0219	0.0239	0.0222	0.0232	0.0396	0.0662
20	0.0271	0.0295	0.0274	0.0287	0.0488	0.0817

December 22nd, 1914.

R. T. GLAZEBROOK,
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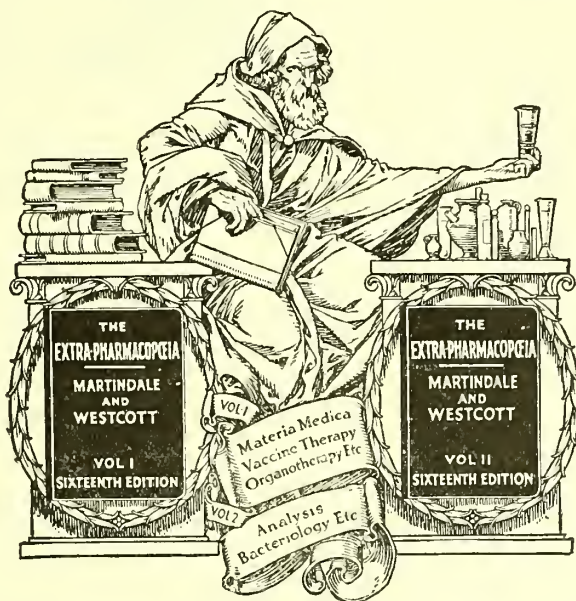
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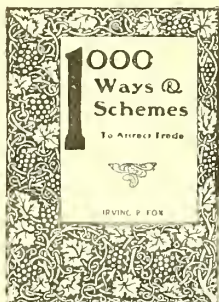
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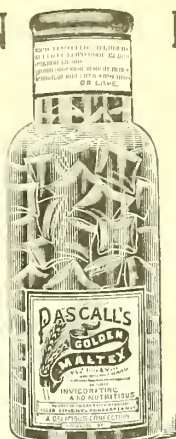
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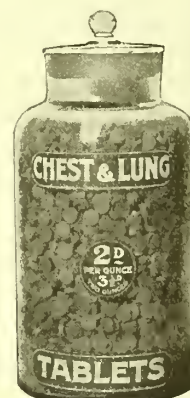
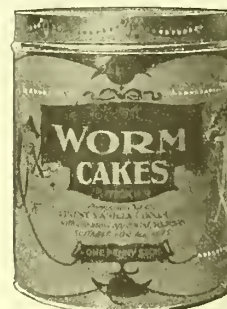
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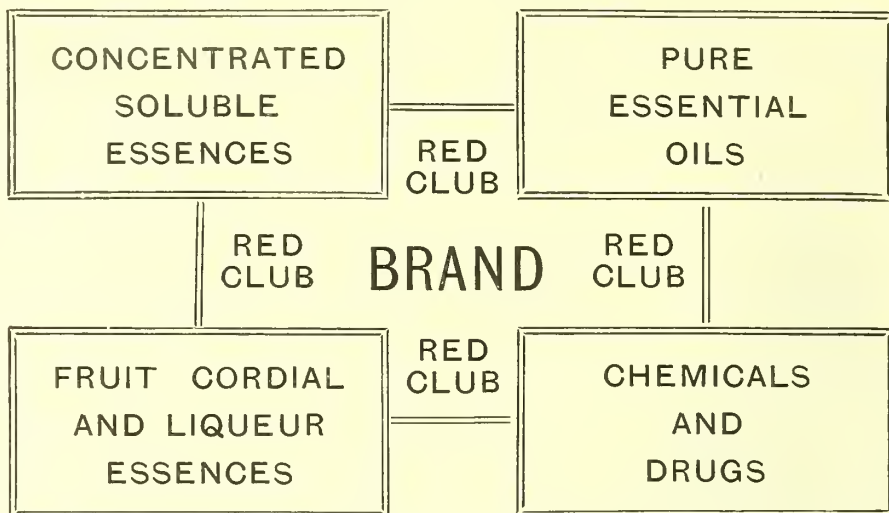
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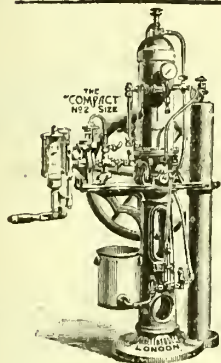
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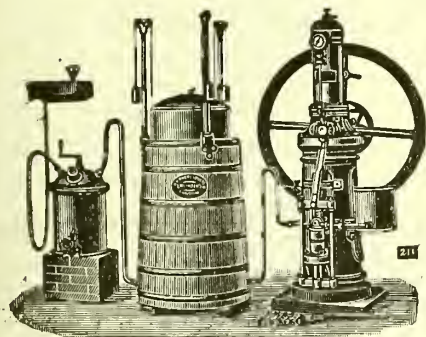
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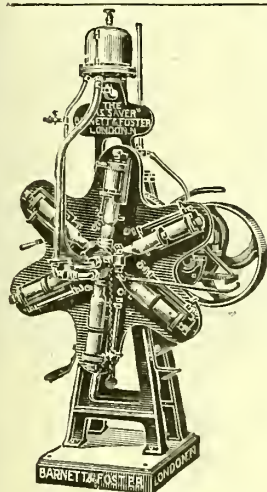
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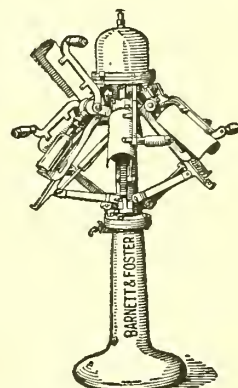
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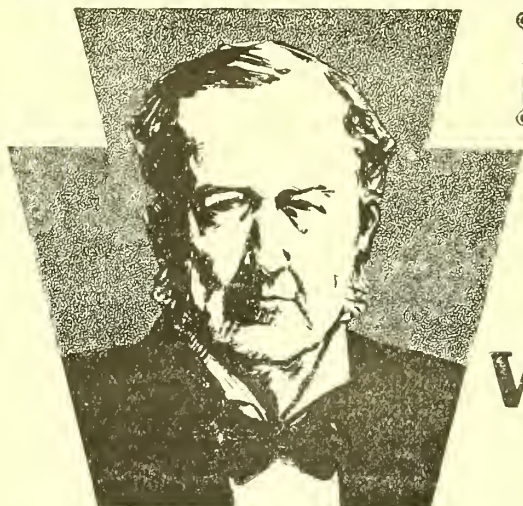
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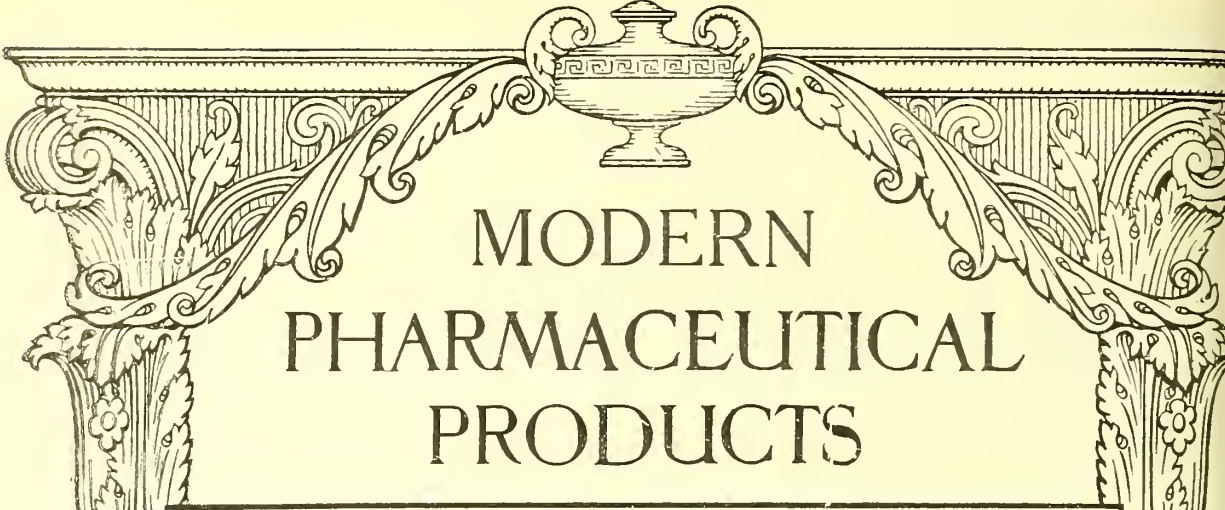
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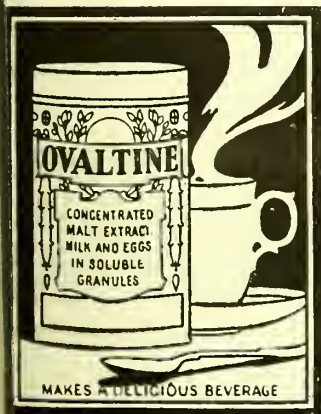
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LOSALL'S COMPOUND SULPHUR SOAP.

A valuable emollient medicated skin soap, especially suitable for use in Eczema. 1/- 8/-

Chemists requiring effective advertising matter for Losall's Salt, &c., will, on application direct to Lofthouse & Saltmer, receive a liberal supply of Dummies, Showcards, Window Slips, Price Tickets, &c., Carriage Paid, whether or no they have an account open with the Firm.

SPECIAL TERMS ARE OFFERED FOR WHOLE OR PART WINDOW DISPLAYS.

SAPONINE

(SOLUBLE),

MANUFACTURED BY

C. W. FIELD, LTD.,

Cambrian Mills, LIVERPOOL.

Special Terms to Wholesalers and large Consumers.

SITES for WORKS, FACTORIES, WAREHOUSES, etc..

ADJOINING THE

GREAT WESTERN RAILWAY.

Within the extensive Districts served by the Great Western Railway Company's system of upwards of 3,000 miles of railway, there are in various localities considerable areas of available land admirably situated and otherwise suitable for the establishment of Works, Factories, etc., in connection with different kinds of Industrial undertakings. These sites are within easy access of some of the principal Ports, Coal and Ironstone Fields, and Iron and Steel producing centres.

Information regarding suitable sites, siding facilities, conveyance rates, etc., will be readily afforded on application to

Mr. G. A. ROBERTS, Paddington Station, W.
FRANK POTTER, General Manager.

QUICK SALES!
BIG PROFITS!

THERMOGENE

CURATIVE WADDING

Thermogene is known and appreciated from one end of the country to the other, but this does not stop us from continuing to advertise its merits.

We have booked large spaces during the next few months in the leading papers. Show the well-known orange-coloured packets in your window, and thus identify your Pharmacy with Thermogene. You will then be certain of getting your share of the increased business.

Special Bonus Terms, Showcards, Dummies, Booklets, free.

THE THERMOGENE CO., Ltd., Haywards Heath.
FASSETT & JOHNSON, 86 Clerkenwell Road, London, E.C.



A Letter to the Trade

Lysol

GENUINE



In Orange Wrapper.

In Orange Wrapper.

9/10 St. Mary-at-Hill, LONDON, E.C.

Dear Sirs,

As we now manufacture LYSOL in this country, and consequently save the profits formerly made by the German Proprietors, we are able to announce a considerable reduction in the wholesale prices, of which kindly take note :

	4 oz. bts.	8 oz. bts.	16 oz. bts.	32 oz. bts.
Minimum Retail Prices (P.A.T.A.)	7½d.	1/-	1/9	3/-
Per dozen assorted	5/-	7/6	12/6	22/-
In original cases containing	6 doz.	3 doz.	2 doz.	1 doz.
Per case	28/-	21/-	23/6	20/6

STRICTLY NET.

The above scale allows a very handsome profit to retailers, and we trust to receive your valued co-operation and support in the sale of this BRITISH MADE AND OWNED LYSOL. It is manufactured after the same method that has made LYSOL so justly famous, and will be found to give entire satisfaction.

We are increasing our publicity scheme amongst the medical, nursing, and veterinary professions, and the general public. In furtherance of this object we have now in preparation and ready for issue shortly, two very attractive showcards of real artistic merit for Chemists' display. We shall be pleased to send same on request.

We are also presenting to Doctors and Nurses a sample of LYSOL in amber glass bottles, with patent safety stoppers, suitable for the pocket or emergency bag. We shall be pleased to forward one of them to any Doctor or Nurse in your district, if you will kindly furnish us with their names and addresses. When sending same we should advise recipients that LYSOL can be had from you.

We beg to point out that we are an entirely British firm, with no foreign capital or staff, our Founder — Mr. Chas. Zimmermann — being a British-born subject.

Thanking you for past favours and support, and esteeming a continuance of same,

We are, Yours faithfully,

CHAS. ZIMMERMANN & Co. (Chemicals) Ltd.

The following LYSOL Specialities are now being advertised :—

“LYSOLINE” Hair Tonic. LYSOL Toilet Soap.
LYSOL (10 %) Surgical Soap. “PASCAREL”—The New Dentifrice.
“LYSOVAS”—Toilet Salve. “LYSOLAN”—Lysol Ointment.
LYSOL Shaving Soap. LYSOL Petroleum Jelly.

Prompt Sales Quick Turnover Increasing Demand Protected Price

You stock "Wincarnis"—our advertising sells it for you. There is an enormous and ever-increasing demand for "Wincarnis," because it is a good article backed up by a powerful advertising campaign. Don't risk losing sales through being out of stock. Glance at your stock now.

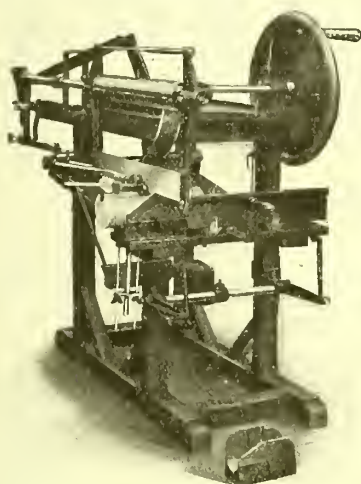
IMPORTANT NOTE TO CHEMISTS WITHOUT LICENSES.—It has been established by law that Registered Chemists may sell "Wincarnis with Quinine" *without* a license.

COLEMAN & CO., Ltd., Wincarnis Works, NORWICH.

WINGARNIS

Absorbent Cotton Wool (SURGICAL WADDING).

Complete Plants supplied for manufacture of above.



ROLL CUTTING MACHINE for Absorbent Cotton Wool.

WM. TATHAM, Ltd.
Rochdale, England.

Chemists & Packers of Sundries

—Should Write for Particulars of—

HAND FILLING TAPS,
FLAT TIN FILLING MACHINES,
LOW PRICED BOTTLE FILLING MACHINERY,
ACCESSORIES, SPECIALLY CONSTRUCTED FOR
RETAIL AND SMALL WHOLESALE
ESTABLISHMENTS, to

ROBERTS'
PATENT FILLING MACHINE CO.,
Head Office & Showroom: 33 Roundcroft St., BOLTON.

SAL HEPATICA

PUT UP FOR EXPORT.

Small Size,	3 oz. bottle, in case.
Medium „	7 „ „ „
Large „	16 „ „ „

OBTAINABLE IN LONDON FROM
Thos. Christy & Co., 4-12 Old Swan Lane,
Upper Thames Street, E.C.

The American Drug Stores, Trafalgar Bldgs.,
6 Northumberland Avenue, London, W.C.

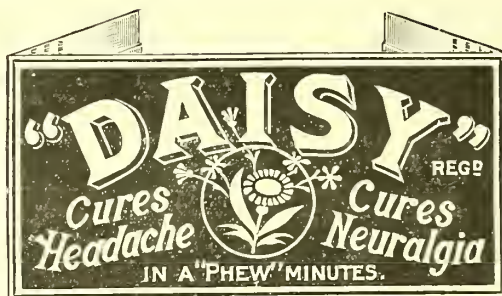
Burgoyne, Burbidges & Co., 16 Coleman St.,
E.C.

F. Newbery & Sons, Ltd., 27 Charterhouse
Square, E.C.

Roberts & Co., 76 New Bond Street, W.



LOOK AHEAD



There is at present great delay in delivery of goods owing to congestion on the Railways and at the Stations. Customers should therefore order well in advance of requirements.

Small parcels will be sent "per return," as usual, by parcel post, but buyers of one, two and five gross should order at least a fortnight in advance of requirements to avoid running out of stock and disappointing their customers.

DAISY, LTD., Mammoth Works, **LEEDS.**

SPECIAL 5% BONUS

over and above the usual terms and discounts will be allowed on all orders of not less than £1 in value received between 11th and 30th January, 1915, for

PLASMON COCOA AND PLASMON OAT-COCOA

— The Finest Beverage of its Class at the Price. —

Plasmon Oat-Cocoa is retailed at 4½d., 8½d., and 1/4 for ¼ lb., ½ lb., and 1 lb. tins respectively. The Trade prices, **exclusive of all discounts**, show a profit of 3d. per lb.

Write for attractive Calendars for distribution to your customers, and for artistic cut-outs for window display.

ALL BRITISH

PRODUCTS.
SUBSCRIBED CAPITAL.
DIRECTORS.

PLASMON, LTD., 66a Farringdon Street, LONDON, E.C.

A GOOD LINE FOR CHEMISTS.

TRADE MARK



ON P.A.T.A. LIST. SHOWCARDS FREE.

FRAME FOOD CO., Standen Road, Southfields, London.

Do You Sell Sister Lauras Food?



The question is often asked nowadays. The Chemist who does not stock Sister Lauras Food is missing a good line.

Sister Lauras Food is achieving great success as a preparation for weakly babes and for invalids and the aged.

It makes milk digestible and is invaluable in cases of malnutrition.

It is a thoroughly reliable line and one that brings a handsome return.

Samples and advertising matter free on application.

SISTER LAURAS INFANT FOOD CO., Ltd., 156 Vincent Street, GLASGOW.

PRICES PROTECTED.

Dr. Allinson's Food Preparations.

Food for Babies, Prepared Barley, Brunak, Power, N-F, Cocoa, Biscuits, Soup, Nutbutter (Walnut Brand), Wholemeal, &c.

NOTICE TO THE TRADE.

We issue a list of WHOLESALE HOUSES who keep above in stock; if for any reason you have difficulty in obtaining supplies, please send postcard direct to us, and a list will be sent to you by return. See trade mark on all our goods: "T. R. ALLINSON." *None Genuine Without.*

NATURAL FOOD COMPANY, LIMITED,
305 Cambridge Rd., Bethnal Green, LONDON, E.

Handbills, Booklets, Showcards, &c., Free.

N.B.—Our goods are to be sold only at prices stated upon the Price List we issue to the trade.

Superior to the German-owned product.

Doctors Nurses Hospitals Patients

after actual comparison with the German article, testify to the better results, better digestibility, and better flavour of the British-owned, British-made

SANAPHOS

Write for the reprints of scores of enthusiastic testimonials corroborating the makers' claims from Doctors, Nurses, Hospitals and Patients:

The British Milk Products Co., Ltd.

69 Mark Lane, London, E.C.

SANAPHOS is a phosphated milk product, sharply distinguished from the numerous casein preparations by the fact that fully 80 per cent. of SANAPHOS is rapidly soluble in cold water; and of this 25 per cent. is casein containing also milk albumin, with an organic phosphorus compound showing a total phosphorus content of 0.70 per cent.

The milk basis *produces milk again* (free from fat) when water is restored to it; and the fluid contains *the active enzymes of raw milk*, which in the manufacture of ordinary casein preparations are

lost. The physiological importance of this fact cannot be over-estimated. It means certain assimilation. A beneficial effect is felt within an hour after SANAPHOS is taken.

It is not only more completely digestible than the German product and its many imitators, it is far superior in flavour. It is accepted and appreciated by the most delicate palate, a fact which greatly enhances its tonic effects.

The Directors of the Company personally guarantee that SANAPHOS is wholly British-owned and

British-made and all the shares are held by British subjects.

The Chairman of the Company is Sir WILLIAM TAYLOR, K.C.B., M.D., late Surgeon-General of H.M. Forces.

SANAPHOS is sold in tins at 1/-, 1/6, 2/6, or 5/- fixed retail prices, protected under the P.A.T.A. It is being widely advertised. Supplies of reprints of testimonials and other advertising matter can be obtained by any Chemist stocking SANAPHOS.

**Have you secured
your supply?**

DIGESTIVE BENDER'S PREPARATIONS

REG. DESIGN No. 585439

ON THE
P.A.T.A.
LIST

GOLD MEDAL AWARDED

Health Exhibition, London, Adelaide and Melbourne.

Showcards &
Handbills on
application

*The British
Medical Journal*
says :

"Benger's Food has
by its excellence
established a reputa-
tion of its own."



REG. DESIGN No. 585439

The Lancet
describes it
as :

"Mr. Benger's
admirable pre-
paration."

For Infants, Invalids, and the Aged.

This delicious, highly nutritive, and most easily-digested Food has been very successfully used in England for many years in the rearing of Infants, and by those whose digestive powers have been weakened by illness or age. It may now be obtained in sealed tins of Chemists, &c., throughout the Colonies and Abroad, and will prove a boon to Mothers and Nurses.

The Practitioner says :—"All these preparations are, we think, deserving of highest praise."

The London Medical Record says :—"It is retained when all other foods are rejected. It is invaluable."

The Medical Press and Circular says :—"Few modern improvements in pharmacy have done so much as Benger's Preparations to assist the physician in his treatment of the sick."

BENGER'S FOOD is sold in Tins at 1s. 6d., 2s. 6d., 5s., and 10s., by Chemists everywhere.

LIQUOR PANCREATICUS (Benger). (REGISTERED.)

Containing all the digestive principles of the fresh pancreas. Used to prepare peptonised or partially digested milk and other articles of food. Directions for use with each bottle.

In 4, 8, and 16 oz. Bottles, to retail at 2s. 6d., 4s. 6d., and 8s. 6d.

BENGER'S PEPTONISING POWDERS ("Pulvis Pancreatis Alkalinus, Benger"). Half a powder will peptonise a pint of milk, gruel, beef tea, &c., in a few minutes. **Box of Eight Powders**, to retail at 1s.

LIQUOR PEPTICUS (Benger).

An exceedingly active fluid Pepsine. Dose.—One or two teaspoonfuls with meals. It is without disagreeable taste.

In 4, 8, and 16 oz. Bottles, to retail at 3s., 5s. 6d., and 10s. 6d.

BENGER'S PEPTONISED BEEF JELLY. A Delicious Quick Restorative.

A concentrated, partially digested, and solidified beef tea, of delicate flavour. Unlike the various Extracts and Essences of Meat, it contains much of the fibrin or flesh-forming element of the beef in solution.

Glass Jars, 2s. each.

BENGER'S PEPTONISED CHICKEN JELLY.

A Nutritive Delicacy for Invalids. Glass Jars, 2s. each.

BENGER'S ESSENCE OF RENNET (Curdling Fluid).

Bottles 1s. and 1s. 9d. each.

BENGER'S PANCREATISED LENTIL FLOUR.

This flour is specially prepared for the use of children and invalids. It can be used in the same way as the well-known "Benger's Food," for which it may be substituted when a change of diet is thought desirable.

Sold in Tins at 1s. 6d. and 2s. 6d.

Benger's Preparations have the unqualified recommendation of the Medical Profession throughout the world.

Of all Wholesale Houses and Shippers or from the sole Manufacturers—

BENGER'S FOOD LTD., ——— **OTTER WORKS, MANCHESTER, ENGLAND.**

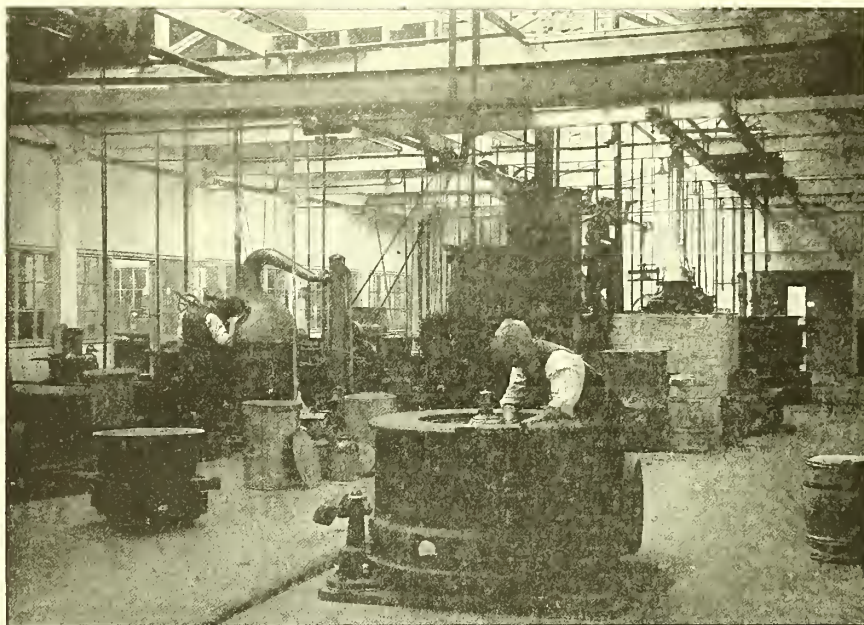
BRANCH OFFICES : **NEW YORK** (U.S.A.): 92, William Street.

SYDNEY (N.S.W.): 117, Pitt Street.

CANADIAN AGENTS : The National Drug & Chemical Co., Ltd., ——— 34, St. Gabriel Street, MONTREAL, and branches throughout CANADA. (49)

SOUTHALLS'

New Chemical Laboratories



Specially designed and erected for the manufacture of fine chemicals, these laboratories have been equipped with the most up-to-date plant and machinery for the preparation of pure products.

We manufacture:

Chloroform (in bulk,
amber stoppered
bottles or sealed flasks)

Potassium Iodide

Ferri et Quininæ Cit.

Ferri et Ammon. Cit.

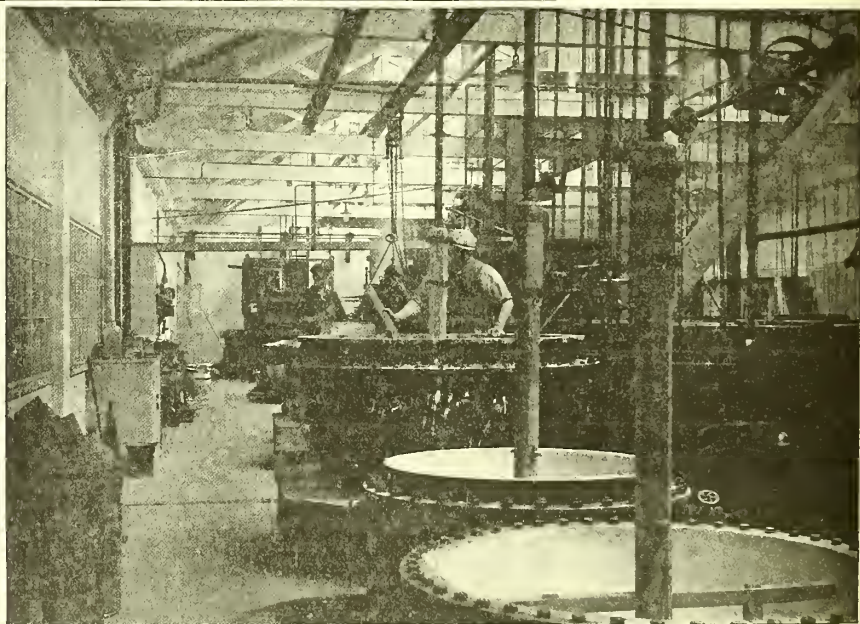
Sodii Sulphas, "Pea"
and "Feathery"

Citrates of Potassium
and Sodium

Benzoates

Hexamine

Iron Salts, etc. etc.



SPECIAL PRICES FOR LARGE QUANTITIES & CONTRACTS ON APPLICATION.

SOUTHALL BROS. & BARCLAY, Ltd., BIRMINGHAM.

The All-British TONIC FOOD VITAFER



Awarded a Gold Medal at the International Congress of Medicine, London, 1913.

VITAFER is the Tonic Food that fortifies the system against

MALARIA, ENTERIC & DYSENTERY,

and is most valuable in the after-treatment of parasitic diseases, as also in the general treatment of all nervous affections, such as Neurasthenia, Brain Fag, &c.

VITAFER is superior to all similar products, whether of German or other origin, not only because it contains the whole Protein of Milk, including the Lactalbumen, but because its Glycerophosphates include not only that of Sodium but those of Calcium and Magnesium also, the former being of great value in nutrition, whilst the latter counteracts the tendency to constipation which generally follows the use of concentrated foods.

It is packed suitably for Special Markets—e.g. for India and the Tropics, in bottles containing 4 oz., 8 oz., and 16 oz.

Wholesale Agents or Merchants should in all cases specify the market, so as to get the right packing.

AS A GUIDE TO BUYERS, THE PRICES FOR THE HOME TRADE ARE AS FOLLOW:—

In Square, Upright Tins, containing 2 oz., 4 oz., 8 oz., and 16 oz.

Wholesale : 9/-, 14/6, 24/-, 42/-
PER DOZEN

Export Terms and Full Particulars of Advertising Aids on Application.

VITAFER CHOCOLATE.

A DELICIOUS CONFECTION & GENUINE STIMULANT.

Much appreciated by Soldiers at the Front, when Marching, in Training, etc.

In 6d. and 1 - packets. Packed in Handsome Counter Boxes of 2 and 3 dozen 6d. and 1 dozen 1/-.

4/9 and 9/6 per dozen.

SOUTHALL BROS. & BARCLAY, LTD., BIRMINGHAM.

No. 1.

B.C.C. NEWS PAGE.

No. 1.

In cases of nervous disorders,
as you know, Phosphorus is a fine nerve tonic—when it is in
such a form that it can be assimilated.



Terms.—14 days net or 2½% discount
cash with order. An additional 5%
allowed on orders up to value of £5
assorted, or one size.

Profit 110 %

For the convenience of chemists who
wish to pack under their own name,
we also supply our Tonic Food in
bulk, in packages of 7, 14 and 28 lb.
Prices on application.

ALBUMOZO Tonic Food

should be recommended in all cases where
nervous disorders are present because it is
not only a valuable food in itself, but contains
5% sodium glycerophosphates and can be taken
by the most debilitated with the sure know-
ledge of quick and wonderful results.

Easy to Take, Pleasant to Taste.

	Wholesale.	To Retail at
2 oz.	8/- per doz. tins.	1/3 per tin.
4 oz.	12/6 "	2/- "
8 oz.	18/- "	3/6 "
16 oz.	30/- "	6/- "

Profit and Prestige Makers

B.C.C. products not only
carry really "worth-while"
profits, but are so skilfully
compounded and so stead-
fast in quality that you
can confidently recommend
them to even your most
critical customers. By
handling our lines you can
build up prestige and in-
crease goodwill.

British Casein Co. Ltd. (1911)

A New B.C.Co. Line

In February we are putting on the
market a new product to be known as

Ten times more nourishing
than ordinary cocoa is

ALBUMOZO COCOA

This fact alone gives you a
fine selling point. This
preparation consists of the
Finest Cocoa and Pure Milk
Proteid ideally blended to
produce a perfect tissue-
builder and nerve-bracer.
Packed in 8 and 4 oz. tins,
it is a profitable and quick-
selling line at 1/3 and 9d.

ALBUMALT

This line will be as reliable and
profitable as one to handle as the
better-known ones. It is eminently
suitable as a diet for all cases of
fever, digestive complaints and
wasting diseases, whilst for aged
people and nursing mothers it is
superior to all others. Write for
fuller details.

Milk Proteid, Sodium Glycerophos-
phates and Ovo-lecithin are the
constituents of

CASOGEN Tonic Food

All prepared and blended in such a
way that the product is superior
to and distinct from all others.
Contains 1½% natural Lecithin orga-
nically combined with the natural
Lecithin of the Glycerophosphates
and the Organic Salts (Phosphates)
of Milk Proteid. It is an ideal food
in cases of Neurasthenia, Anaemia,
Nervous Debility, Dyspepsia, Neuri-
tis, Influenza and Intestinal Atony.

Note.—All our Preparations may be had
in Bulk, packed in air-tight, tin-lined
packages of 14, 28 and 56 lb. Our reason
for doing this is to enable chemists or
export merchants to sell them as their own
proprietary.

SAMPLES and full particulars of any of our preparations
sent anywhere if the "Chemist & Druggist"
be mentioned. Colonial orders through indent merchants.

Our products are specially packed for
export to the tropics, in glass bottles,
or as required by our customers.

The BRITISH CASEIN CO. (1911) Ltd., 24 Gt. Dover St., London, S.E.

Cables—"Albumozo London."

Telephones—309 Hop ; 8633 Central.

High Praise from a High Official

14th December 1914

Messrs the British Casein Coy. Ltd.

Dear Sirs,

I wish to tell you of the great benefit that I have derived from the use of Albumozo for myself during rather strenuous work for the last four months owing to the war.

Having been recommended to try it, I did so without much hope of any effect. The result however has been so remarkable in proving its stimulating and sustaining qualities that in gratitude to you I feel I should let you know of it.

You are at liberty to make any use of this letter, provided you do not publish my name or address, or signature.

yours faithfully

COULD we but divulge the name and titles of the distinguished author of this letter, you would realise how weighty with you should be his opinion.

You can feel sure if Albumozo Tonic Food gives such satisfaction to the expert, it will more than please your customers.

It will please YOU, because it sells rapidly and carries a

Minimum Profit
of 110 per cent.

Albumozo Tonic Food is 95% pure soluble milk casein, and 5% sodium glycerophosphates. Packed in 2, 4, 8, and 16 ozs. attractively labelled tins, retailing at 1/3, 2/-, 3/6 and 6/-, respectively. Mention "Chemist and Druggist," and we will send samples FREE, and post free, to any part of the world.

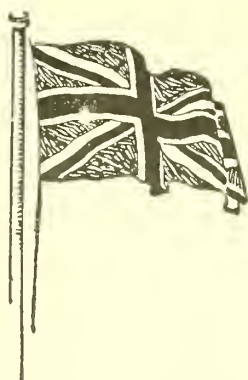
T E BRITISH CASEIN CO. (1911) LTD.,
24 Great Dover Street - - - LONDON, S.E.

Cables :—"Albumozo, London."

Telephones :—309 Hop ; 8633 Central.

ALBUMOZO

The Tonic Food



F. SCHUTZE & Co. Ltd.

MANUFACTURING SUNDRIESMEN AND PERFUMERS,
Market Road, LONDON, N.

Cable Codes : ABC, 5th, WESTERN & PRIVATE. Telephone : 2782 NORTH.
Address for Marconigrams & Telegrams : "ODORATORS, HOLWAY, LONDON."

BY placing indents with us you are dealing with actual manufacturers and assisting British Industry. Our factories are situated in the healthiest part of London, and are constructed in accordance with the highest principles of hygiene. A further extension has been made this year and the entire factories are complete with the most up-to-date machinery. The following leading lines indicate our comprehensive output:—



MASTER BRAND

SURGICAL GOODS OF ALL KINDS, ESPECIALLY BELTS, CHEST PROTECTORS, SUSPENSORY BANDAGES AND TRUSSES.

SUNDRIES—CUT-GLASS BOTTLES, HOT WATER BOTTLES & COVERS, MANICURE OUTFITS, ODORATORS, SYRINGES IN ENTIRETY, BABY PACIFIERS, TEATS & FEEDING BOTTLES.



CORBYN'S ALL-BRITISH EAU DE COLOGNE.
CORBYN'S NATURAL PERFUMES.

GRANT & CIE
TOILET
PREPARATIONS.



HANSA PLATZ EAU DE COLOGNE.
POWDER PUFFS IN GREATEST VARIETY.
HYDROTHERAPEUTIC APPLIANCES.

Illustrated Lists on Application.

Quotations Offered Promptly.

THE IDEAL
TONIC
VITAGEN
NERVE
FOOD

Pure Milk Casein
with Glycerophosphates,
under the name
VITAGEN

or Buyer's own name.

*A perfectly reliable preparation,
superior to German prepara-
tions of the same class
at half the price.*

Tins
same weights
as Sanatogen
VITAGEN

7/-, 11/-, 18/-, 30/-
dozen.

ACETOPIRIN

identical with
ASPIRIN

Bottles of
25's and 100's.

**FORMALIN-
MINTS**

Bottles of 50.

ESTABLISHED 1872

Cable
Address :
"SELGOG
LONDON."



TRADE MARK.

Telephone :
362
LONDON
WALL

JOHN LORIMER

119 Finsbury Pavement, London, E.C.

Founder of Lorimer & Co., 1872.

Retired from it, 1903.

*Not connected with any other Firm or Company using the
name of "LORIMER," nor with any Retail House or
Company.*

Selling Agent for

THE ENGLISH DRUG & CHEMICAL CO., LTD.

Makers of

GLYCEROPHOSPHATES AMBRETTE-MUSK
IONONE GUAIACOL VERONAL
METOL SALOL LYSOL

CRESOL DISINFECTANTS.

Starch free
**INFANTS'
FOOD**

A Soluble
Maltose Food.

Surgical
Antiseptic
and Disinfectant.

LYSOL

Water-soluble in
any
proportion.

ALL =
BRITISH
LYSOL

In bottles with Measures.

4 8 16 oz. 1 gall.
4/3 7/- 12/6 doz. 7/- each

A pure
Cresol preparation
and contains 50 per
cent. of Cresylic Acid.

LYSOL

is
perfectly neutral.

**MALT
& MILK
Tablets.**

EAU DE BOLOGNE

When the City of Cologne belongs
either to France or Belgium this per-
fume may again revert to its old name
of "Eau de Cologne," meanwhile
patriotic Britons will for many rea-
sons leave ALL perfumes bearing

EAU DE BOLOGNE

the name of Cologne severely alone.
This City has led in virulent attacks
on ENGLAND and everything
BRITISH. Advertising its name
and chief trade is but playing into
the enemy's hands.

Telegraphic Address:
"CRESSWELL, WESTCENT, LONDON."

WORLD'S HEADQUARTERS FOR

Telephone:
No. 1432 HOLBORN.

SPONGES

INTERNATIONAL SPONGE IMPORTERS, LIMITED.

CRESSWELL BROTHERS

Sponge Importers, Exporters and Merchants, and Chamois Leather Dressers, [BRANCH.
18 & 19 RED LION SQUARE, New Warehouses and Steam Bleacheries, LONDON, W.C.
45 EAGLE STREET.

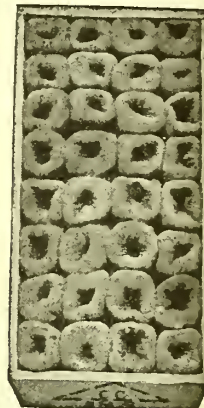
LARGEST SPONGE WAREHOUSES IN THE WORLD.

Buyers are invited to call to inspect our Magnificent Stocks and make their own Selections. Lowest Market Prices. Absolutely Best Values. The following abridged List will serve as a guide to Buyers when writing.

UNBLEACHED MEDITERRANEAN SPONGES in Original Cases.



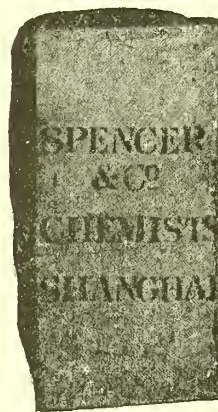
HONEYCOMB.	HONEYCOMB.	HONEYCOMB.	FINE TURKEY CUPS	FINE TURKEY
Extra Choice. FINEST TEXTURE and SHAPE. The Pick of all the Fisheries.	Toilet & Bath Good 2nd Quality.	3rd Shape. Toilet & Bath. Largest Sponges Av'ge obtainable at the prices.	1st Quality. PICKED SHAPES.	SOLIDS. SELECTED SHAPES.
Pieces in Case.	Average Price per Piece.	Pieces in Case.	Average Price per Piece.	Average Price per Piece.
400 Toilet at 6d.	300 at 4 1/2d.	330 at 2d.	Toilet Selected 300 at 1/-	250 at 1/3
300 " " 9d.	180 " 9d.	300 " 3 1/2d.	" 200 " 1/6	Nursery 400 at 3d.
250 " " 1/-	170 " 1/-	280 " 4 1/2d.	" 175 " 1/9	" 300 " 4d.
200 " " 1/6	160 " 1/2	250 " 6d.	" 150 " 2/-	" 200 " 6d.
160 " " 2/-	160 " 1/6	200 " 8d.	" 140 " 2/6	" 200 " 8d.
140 " " 2/6	150 " 1/9	180 " 9d.	" 100 " 3/-	" 200 " 1/-
120 " " 3/-	140 " 2/-	160 " 1/-	" 90 " 3/6	Toilet 150 " 1/6
100 " " 3/6	120 " 2/6	140 " 1/3	" 80 " 4/-	" 100 " 1/9
90 Medium Bath 4/6	110 " 3/-	120 " 1/6	" 70 " 4/6	" 100 " 2/-
80 " " 5/6	90 " 3/6	100 " 1/9	" 60 " 5/-	" 80 " 2/6
72 " " 6/6	80 " 4/-	90 " 2/-	" 50 " 6/-	Bath 50 " 3/-
60 " " 7/6	75 " 4/6	80 " 2/6	" 45 " 6/6	" 36 " 4/-
45 Large Bath 8/6	70 " 5/-	60 " 3/-	Bath Selected 40 " 7/6	" 24 " 5/-
30 " " 10/6	65 " 5/6	45 " 4/6		
24 " " 12/6	60 " 6/6	30 " 5/-		



THE CONTENTS OF THE ABOVE CASES WILL BE PRESS-PACKED AND SENT POST FREE TO COLONIAL AND FOREIGN BUYERS WITHIN THE RADIUS OF PARCELS POST.

IMPORTANT NEW DEVELOPMENT.

SELECTIONS OF SPONGES TO SUIT CHEMISTS
SENT BY PARCELS POST, POSTAGE PAID
TO ANY PART OF THE WORLD.

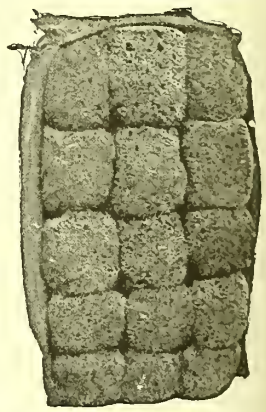


A large number of Chemists in various parts of the world have lately been in the habit of ordering assortments of Sponges press-packed, by parcels post, thus buying in the cheapest manner and incurring no cost of freightage.

We compress the sponges in order that a large number may be packed and sent in a small space. All that is necessary is that the Sponges be placed for a short time on arrival under damp cloths, when they will swell out and assume their original size and shape.

Chemists, therefore, have the benefit of receiving a selection of Sponges, "freight free to destination," and they can rely upon that selection being one eminently suitable for their trade. When ordering it should be stated whether first or second quality is required.

We have now gone thoroughly into the question of supplying Chemists by the method described above and have pleasure in quoting the following selections:-



Showing Package as ready for dispatch.

Selection "A"—1 dozen choice Unbleached Honeycomb Toilet and Bath Sponges, suitable for best-class trade, each at 12/-, 24/-, 36/-, 48/-, and 72/- per dozen. 1 dozen choice Unbleached Turkey Cups, each at 24/-, 36/-, and 48/- per dozen ... value £15 0s. 0d.
Selection "B"—1 dozen Unbleached Honeycomb, Medium quality, for Toilet and Bath use, each at 12/-, 18/-, 24/-, 36/-, 48/-, and 60/- per dozen. 1 dozen Unbleached Turkey Cup Sponges, each at 24/-, and 36/- per dozen ... value £12 18s. 0d.
Selection "C"—1 dozen Unbleached Honeycomb, large for the money, suitable for the Drug Store trade, each at 12/-, 18/-, 24/-, 30/-, and 36/- per dozen. 1 dozen cheap Turkey Toilet Sponges at 18/-, 24/-, and 30/- per dozen ... value £10 11s. 0d.

Each Sponge ticketed and numbered to correspond with invoice. Remittance to accompany order.

All orders will receive our prompt and careful attention and will be dispatched to any part within the radius of the parcels post "free." The Selections can be ordered through Merchants in the usual way.

Chemists can order other selections in accordance with their particular requirements. The selections we have quoted are, generally speaking, assortments suitable for a restocking order.

TERMS 2 1/2% CASH WITH ORDER.

LOOSE GOODS DEPARTMENT. Where Honeycomb, Turkey, and Cuban Sponges—Bleached or Unbleached—are sold in smaller quantities to suit customers' requirements. Large and varied selections always on show at lowest market prices.

INTERNATIONAL SPONGE IMPORTERS, LIMITED,

CRESSWELL BROTHERS

Sponge Importers, Exporters and Merchants, and Chamois Leather Dressers, [BRANCH.

18 & 19 RED LION SQUARE, New Warehouses and Steam Bleacheries, LONDON, W.C.
45 EAGLE STREET.

NOTICE.

—“THE P.A.T.A. COUNCIL fully appreciated the importance of securing for members who protect the interests of the distributors, that reciprocity on the part of the trade to which they are, in the opinion of the Council, entitled, and would be glad to consider any suggestions for furthering this end.”

[W. S. GLYN-JONES, SEC. P.A.T.A. ASS., in the Report of the P.A.T.A. Council Meeting held Jan. 14, 1915.]

ONLY A JUST QUID PRO QUO AFTER ALL!

AS FAR AS THIS CONCERNS OURSELVES—

OUR SUGGESTION IS a stock of the following preparations which are all protected by the P.A.T.A. :—

ALPINE SNOW

Considered the nicest cream of its kind by cultured critics.

CREAM OF MALT

A malt extract of known diastasic activity guaranteed free from addition of any description.

MAGLACTIS

An antacid and corrective which has been extensively recommended by dentists for the mouth.

ROBOLEINE

The nutrient food which is gaining such popularity in all cases of malnutrition.

CAPSOTHERM

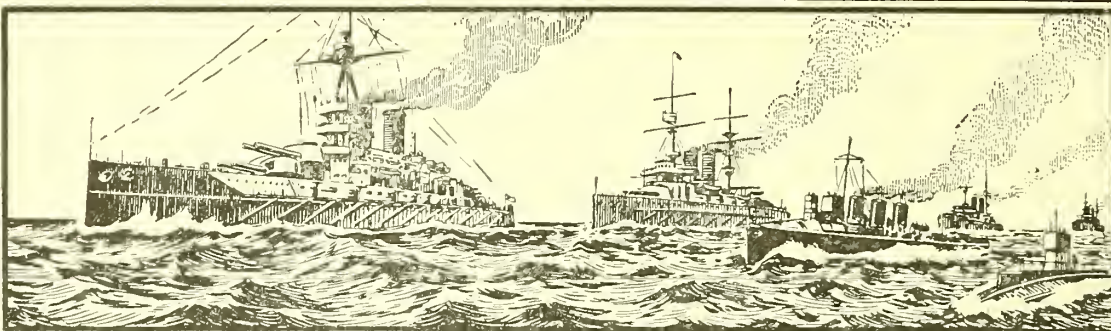
The only capsicum wool with an impermeable backing. Easiest to wear. No evaporation. Effect prolonged.

PULTICINE

An antiseptic poultice maintaining a uniform degree of heat for 24 hours. Clean and easy to use.

OPPENHEIMER, SON & CO., Ltd.
179 Queen Victoria Street, London, E.C.

ENTIRELY BRITISH HOUSE SINCE FOUNDATION.



SEAS CLOSED TO ENEMY COMMERCE

British - made Products for British Pharmacists

Long before the outbreak of the present war BURROUGHS WELLCOME & Co., were aiming to preserve and bring back to the British Empire some of the industries which were fast slipping away.

Now that the enemy's export trade by sea has been strangled by the British Navy and the supply of enemy products cut off, the work of Burroughs Wellcome & Co. is bearing ripe fruit for medical and pharmaceutical science.

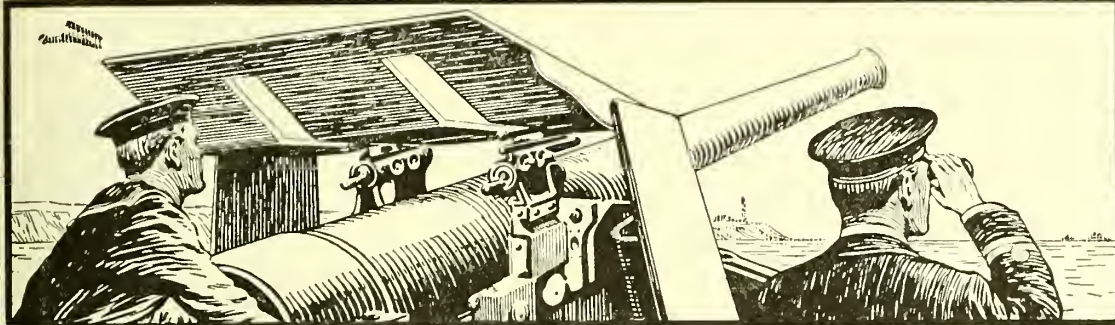
The few examples, given in the following three pages, serve to show that the Firm is taking an active part in the economic war waged on behalf of British science and industry.



BURROUGHS WELLCOME & CO., LONDON
NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN
SHANGHAI BUENOS AIRES BOMBAY

All communications intended for the Head Office should be addressed to Snow Hill Buildings, London, E.C.

London Exhibition Room: 54 WIGMORE STREET, W.



BRITISH EMPIRE CLOSED TO ENEMY GOODS

British Alkaloids and their Salts made by Burroughs Wellcome & Co.



In preparing these alkaloids in the highest attainable degree of purity, the collaboration of the Wellcome Chemical and Physiological Research Laboratories and the Experimental Department of the 'Wellcome' Chemical Works has been secured, whilst the resources of the 'Wellcome'

Materia Medica Farm have been utilised to the fullest extent.

'WELLCOME' Brand—

„ Atropine (<i>Pure Alkaloid</i>), B.P.	..	4/2 each
Bottles of gr. 60	..	..
„ Atropine Sulphate, B.P.	..	3/9 each
Bottles of gr. 60	..	..
„ Cocaine (<i>Pure Alkaloid</i>), B.P.	..	1/10 each
Bottles of oz. 1/8	..	11/4 per oz.
„ „ oz. 1/2	..	10/9 per oz.
„ „ oz. 1	..	..
„ Cocaine Hydrochloride, B.P.	..	1/8 each
Bottles of oz. 1/8	..	10/2 per oz.
„ „ oz. 1/2	..	9/8 per oz.
„ „ oz. 1	..	..
„ Emetine (<i>Pure Alkaloid</i>)	..	6/0 each
Tubes of 1 gramme	..	21/9 each
Bottles of gr. 60	..	..
„ Emetine Hydrobromide	..	..
Bottles of gr. 60	..	..
„ Emetine Hydrochloride	..	5/6 each
Bottles of gr. 60	..	17/0 each
„ Homatropine (<i>Pure Alkaloid</i>)	..	2/10 each
Tubes of gr. 5	..	..
„ Homatropine Hydrobromide, B.P.	..	..
Bottles of gr. 60	..	..
„ Homatropine Methylbromide	..	2/0 each
Tubes of gr. 5	..	..
„ Hydrastine (<i>Pure Alkaloid</i>)	..	..
Bottles of oz. 1	..	3/10 each
„ Hydrastine Hydrochloride	..	99/0 per oz.
Bottles of oz. 1	..	..
„ Hyoscine Hydrobromide, B.P.	..	4/1 each
Tubes of 1 gramme	..	13/0 each
Bottles of gr. 60	..	..

'WELLCOME' Brand—

„ Hyoscyamine (<i>Pure Alkaloid</i>)	..	..
„ Hyoscyamine (dextro-Hyoscyamine)	..	..
„ Hyoscyamine Sulphate, B.P.	..	5/0 each
Tubes of gr. 5	..	12/3 each
„ „ 1 gramme	..	..
„ Physostigmine (<i>Pure Alkaloid</i>)	..	1/2 each
Tubes of gr. 2	..	2/2 each
„ „ gr. 5	..	..
„ Physostigmine Hydrobromide	..	..
(<i>Eserine Hydrobromide</i>)	..	..
Tubes of gr. 5	..	2/2 each
„ „ 1 gramme	..	5/9 each
„ Physostigmine Salicylate (<i>Eserine Salicylate</i>)	..	1/10 each
Tubes of gr. 5	..	4/8 each
„ „ 1 gramme	..	..
„ Physostigmine Sulphate (<i>Eserine Sulphate</i>), B.P.	..	..
Tubes of gr. 1/2	..	4d. each
„ „ gr. 1	..	6d. each
„ „ gr. 2	..	1/0 each
„ „ gr. 5	..	1/10 each
„ Pilocarpine Hydrochloride	..	..
„ Pilocarpine Nitrate, B.P.	..	1/0 each
Tubes of 1 gramme	..	3/5 each
Bottles of gr. 60	..	24/0 per oz.
„ „ oz. 1/2	..	22/0 per oz.
„ „ oz. 1	..	..
„ Sparteine Sulphate	..	1/0 each
Bottles of gr. 60	..	5/0 per oz.
„ „ oz. 1	..	..

We reserve the right to reduce or refuse orders for unusual quantities

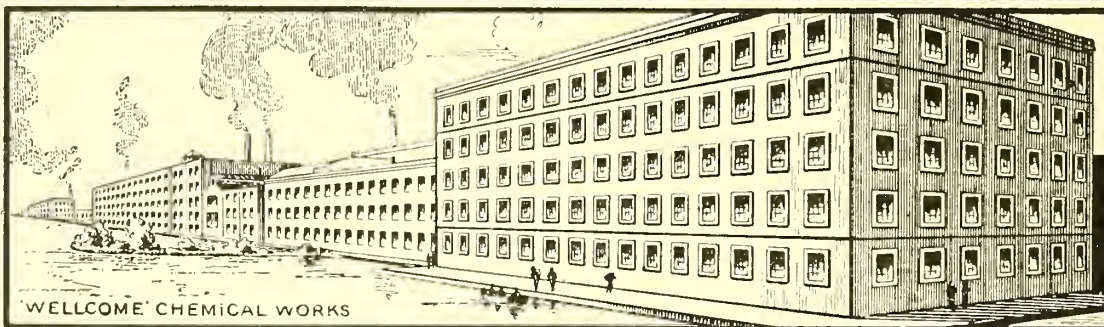


BURROUGHS WELLCOME & CO., LONDON

NEW YORK MONTREAL SYDNEY CAPE TOWN
MILAN SHANGHAI BUENOS AIRES BOMBAY

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London Exhibition Room: 54, WIGMORE STREET, W.



BRITISH RESOURCES EQUAL TO THE OCCASION

'KHARSIVAN' BRAND Salvarsan

(Trade Mark)

Made by BURROUGHS WELLCOME & Co. under licence from the British Board of Trade and biologically tested under arrangements approved by that Board.

'KHARSIVAN' Brand Salvarsan is identical chemically, physically and therapeutically with Salvarsan of German make.

Full particulars on request

'TABLOID' BRAND Hexamine

(Trade Mark)

Hexamine (Hexamethylenetetramine) is official in the B.P. 1914

Hexamine is manufactured at the 'Wellcome' Chemical Works, Dartford, Kent, on a large scale, and of 100% purity, whereas the standard of the new B.P. is only 98%

PREPARATIONS.—'Tabloid' Hexamine, gr. 3 and gr. 5

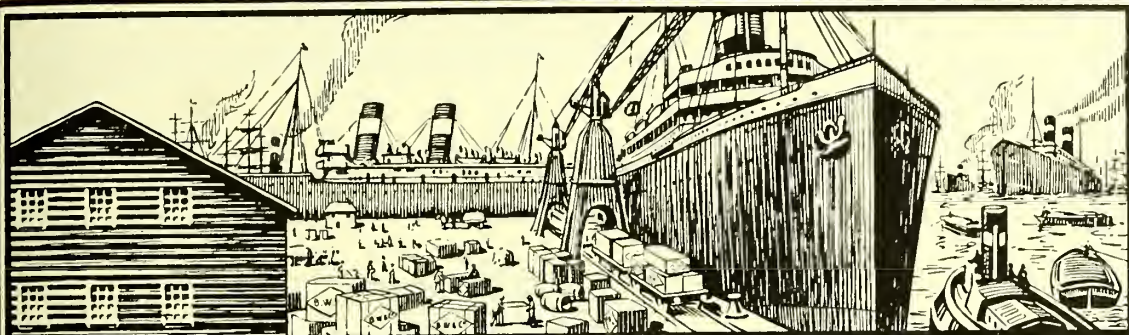
Supplied in bottles of 25 and 100, as follow:—gr. 3, at 6/0 and 18/0 per dozen bottles; gr. 5, at 8/0 and 24/0 per dozen bottles, respectively. Prices subject.



BURROUGHS WELLCOME & CO., LONDON

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BRITISH GOODS TO BREAK ENEMY MONOPOLIES

The Glycerophosphates

Another example of the successful collaboration of the Firm's research and technical staff is the production of salts of definite composition and properties and of the highest purity.

PREPARATIONS

'WELLCOME' Brand
Glycerophosphate

„ of Calcium
„ of Iron
„ of Magnesium
„ of Potassium
„ of Sodium

In 1 oz. and 4 oz. bottles. Prices on application.

'TABLOID' Brand
Glycerophosphates
Compound

Strengths:—dr. 1/2 and 2 c.c., sugar-coated, in bottles of 25, at 12/0, and 100 at 36/0 per dozen bottles.

'ELIXOID' Brand
Glycerophosphates

In bottles of 4 fl. oz., at 16/0 per dozen

'RYTOL' (TRADE MARK 'TABLOID' BRAND 'RYTOL' TRADE MARK) UNIVERSAL DEVELOPER

An All-British Developer originated and made only by BURROUGHS WELLCOME & Co. A favourite with many thousands of photographers throughout the world. One of the most reliable and profitable developers which dealers can push in order to break German monopolies.

In cartons containing materials sufficient for at least 88 ounces of solution. 12/0 per dozen cartons, subject.



BURROUGHS WELLCOME & CO., LONDON

NEW YORK MONTREAL SYDNEY CAPE TOWN MILAN
SHANGHAI BUENOS AIRES BOMBAY

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The advertisement is framed by a decorative border consisting of multiple boxes of Ficolax. Each box features the brand name 'Ficolax' in a stylized font, along with the text 'THE GREAT REMEDY FOR CONSTIPATION' and 'NATURE'S DELIGHTFUL REMEDY'.

IMPORTANT NOTICE CONCERNING

The ideal Fruit laxative.

Ficolax

Our great advertising campaign will commence in February, and during that month we are making a very special offer to Pharmacists who are willing to assist by stocking and displaying FICOLAX.

WRITE FOR PARTICULARS.

FICOLAX, bought on the special terms, must prove a highly profitable investment.

SHIPPERS SHOULD WRITE FOR EXPORT TERMS.

THE BRITISH DRUG HOUSES, Ltd.
GRAHAM STREET, CITY ROAD, LONDON.



THE CHEMIST & DRUGGIST

WINTER ISSUE, JANUARY 30, 1915

Published at the Head Office: 42 Cannon Street, London, E.C.
Branch Offices: Adelaide, Melbourne, and Sydney, Australia.

Subscription: 10s. per annum, including "The Chemist and Druggist Diary." Price of this issue, 1s. post free.

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"C. & D." Dose and Metric Card.

The best thing of the kind. It measures 11 in. by 8 in. and is looped to hang up. Supplied at 2s. 6d. per dozen, or 6d. for two, or 4d. each, post free, and orders, with remittance, should be sent to the Book Department, C. & D., 42 Cannon Street, London, E.C.

Summary.

Subscribers are advised to read this column first.

We have not attempted to summarise the news items in this issue, merely the more important special articles. We closed this section on Wednesday evening, and will insert in the Coloured Supplement news received on Thursday.

Sir James Dewar's latest experiments on gases are described on p. 143.

Mr. J. Grantley Tingle, a Bell Scholar, tells how to bind the C. & D. (p. 148).

The names of pharmaceutical Councillors are traced to their origin in an article beginning on p. 137.

A "Minor" man and Government chemist communicates his experience of work at the London Docks (p. 146).

Messrs. Malen and White prove that iodine solutions are more quickly germicidal than phenol solutions (p. 144).

The illustrated article on papain and papaw on pp. 133-136 is a most interesting monograph on the subject.

Local Insurance Pharmacopœias vary greatly in their formulæ for the same thing. We contrast fourteen stock mixtures on p. 142.

The economic conditions of this country and of Germany at the end of six months' war are briefly reviewed in an editorial article on p. 127.

Corner for Students competitors have singularly failed to describe the experiments set by Dr. Dobbin last month. The prizes go to Mr. W. Ramage and Miss A. R. Benzie (p. 132).

The B.P. preface remarks about the duty of pharmacists in regard to unusually large doses in prescriptions look like giving trouble. We question the General Medical Council's legal authority for dictation on the point (p. 127).

Mr. J. W. Harper (Starbeck) and Mr. D. Llewellyn Jones (Colwyn Bay) contribute good hints on window-dressing, illustrating what they say with photographs (pp. 138-140). We supplement these with some British and American windows (pp. 140-141).

We begin a series of articles on chemico-pharmaceutical inventions which have become public property. Acoine, airol, alumnol, argentamine, argonin, aristochin, aristol, benzosol, chinaphenin, chloralamide, and cresotal are dealt with this week (pp. 149-151).

The positions of quinine and mercury are dealt with editorially (p. 126 and p. 129). Both articles are firm markets. We close our Trade Report on Wednesday evening, the price-movements in the interim including an advance in alum, antimony, ammonium sulphate, salicylates, and cinnamon. Anise, Japan mint, and bergamot oils, cod-liver oil, cloves, and potassium permanganate are cheaper (p. 179).

English and Welsh News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Brevities.

Ealing Town Council on January 23 issued an order for chemists to close each Wednesday at 1 P.M.

Mr. Archibald John Bellamy, chemist and druggist, Taffs Well (Glam.), is to apply for a wine off-licence.

The quarterly report of the Morley (Yorks) Co-operative Society states that, during the period under review, the purchases from Co-operative sources for the drug department amounted to only 35.5 per cent. of the whole.

An outbreak of fire was discovered at the chemical works of Hirst, Brooke & Hirst, East Lane, Leeds, on the morning of January 24. It had evidently been smouldering for some time, and when the alarm was given some charcoal stored on the first floor was alight. The fire-brigade succeeded in getting the fire under in about an hour, but most of the material stored with the charcoal was destroyed.

The report to the Home Office by Major A. Cooper-Key, H.M. Chief Inspector of Explosives, has been published this week on the circumstances attending an explosion of picric acid at the factory of Henry Ellison, Ltd., Heckmondwike, on December 2, 1914. The Inspector expresses the opinion that the explosion was probably due to the accidental presence in the grinding-mill of a nail, stone, or other hard foreign substances. The occurrence was therefore accidental, and not due to negligence.

Two cases of poisoning by the accidental taking of an overdose of morphine have been reported during the week. A retired dentist of Torquay, who had been using the drug for years to allay pain, and who, it was stated, knew the danger, was found in a semi-conscious condition, and died in spite of prompt medical attention. A Silverdale man, who had several times been found suffering from morphine-poisoning, died through taking an overdose. A Hampstead woman committed suicide by taking laudanum.

The members' circular of the Civil Service Supply Association, Ltd., for February gives prominence to aperients, surgical bandages, etc., perfumes and toilet-specialties, soaps, etc. A page and a half is devoted to alterations in the general price-list necessitated by the unsettled state of the markets and the difficulty in obtaining supplies. The Association has also issued a special sale catalogue for the first ten days of February, in which a large stock of remainders of high-class toilet-goods, soaps, perfumes, toilet-powders, etc., are offered at special prices.

Institute of Chemistry.

This month four candidates presented themselves for the Intermediate examination and two passed: G. T. Bray and E. G. Macintyre, B.Sc. (Glas.). Of thirteen candidates who presented themselves for the Final (A.I.C.) examination, five passed: In the branch of mineral chemistry, R. L. Amore and E. G. G. Wheeler; in the branch of organic chemistry, W. J. S. Naunton, M.A. (Cantab.), B.Sc. (Lond.), and H. Shulman, B.Sc. (Lond.); in the branch of chemistry (and microscopy) of food and drugs, fertilisers and feeding-stuffs, soils, and water, W. S. Clark.

Vets. in Jersey.

At a sitting of the Jersey States last week, the local "home-rule" legislative assembly, Jurat W. Duret Aubin, M.B., introduced a Bill making it necessary for persons desirous of practising as veterinary surgeons in that island to be holders of satisfactory diplomas, and be duly registered at the Royal Court of Jersey. He had, he said, based his Bill on the English Act—though some of the provisions of the latter could not apply locally. The tabling of the Bill was seconded by Jurat H. E. Pinel, M.R.C.V.S. (ex States Veterinary Inspector), and it will come on for discussion in due course. Dr. Duret Aubin (Lieutenant-Bailiff of Jersey) is author of the Jersey "Chemists and Druggists Law."

Chemist Defends Apothecaries.

At the annual meeting of the Clacton Cottage Hospital on January 16, a resolution was brought forward emanating from the medical staff, which sought to alter rule 17 so that only university graduates or members or fellows of the Royal College of Surgeons could hold position on the medical staff. The resolution was proposed, seconded, and supported by three medical men present. Mr. W. Maskew, Ph.C., opposed it as he considered that the rule would reflect on the qualifications of two medical men in the town. The examinations of the Apothecaries Society are, he said, of the same standard as other medical qualifications, and the same curriculum of study is required. Mr. Maskew proposed that the resolution be deferred twelve months, this was seconded, and supported by other speakers, but when put to the meeting was rejected. The original resolution was then carried.

A Chemist's Son Killed.

At Torquay on January 26 an inquest was held on Lieutenant Simpson and Sub-Lieutenant Hart, R.N., who were fatally shot by a Territorial patrol. The two officers were proceeding along the Torbay Road in a motor-car when two men of the patrol, armed with loaded rifles, stepped into the road. They stopped the car and searched it, in spite of objections made by the officers, saying they were obeying orders. During the altercation one of the rifles, which were held "at the ready," went off, killing one of the officers and mortally wounding the other. Sub-Lieutenant Hart was the son of Mr. James Hart, chemist and druggist, superintending pharmacist of the Royal Naval Hospital, Plymouth. He joined the Royal Naval Air Service in September, and had been home at Plymouth on sick-leave. The two Territorials concerned have been arrested in connection with the affair.

Guardians' Doings.

Mr. W. W. Matthewson, chemist and druggist, dispenser for the Latchmore Road and Severns Road Dispensaries, Battersea, has been appointed by the Wandsworth Guardians dispenser for Battersea (No. 1 district), in succession to Mr. E. E. Hill, at the extra remuneration of 30*l.* per annum, to include travelling expenses. The hours of attendance have been adjusted so as to permit Mr. Matthewson to attend at the three dispensaries.

The Contracts Committee of the Southwark Board of Guardians has reported to the Board that it had considered the letter of the British Drug Houses, Ltd., with reference to the new Pharmacopœia (*C. & D.*, January 16, p. 37), and found that the supply of drugs under it is provided for in the tender form, which states that all drugs are to be in accordance with the latest Pharmacopœia. The dispensing staffs at the various institutions controlled by the Guardians were instructed accordingly.

Contracts for Drugs, etc.

The following contracts of interest to pharmacists have been concluded:

Ledbury Guardians.—Mr. V. W. Meacham, chemist and druggist, for medicines for one year at the following rates: up to 8-oz. mixtures, 7*d.* (bottles free); 12-oz. to 16-oz. bottles, 9*d.*; with extra charges for special drugs.

London County Council.—For annual supplies: Cresswell Bros., Ltd., General Sponge Fishing Co., Ltd., and John Phillips & Sons, for sponges; Anti-Scrub Soap Co., Isaac Bentley & Co., Ltd., Isdale & McCallum, Ltd., Jno. Knight, Ltd., Palmer & Co., Ltd., T. B. Rowe & Co., Ltd., and Richard Whelan & Sons, Ltd., for soap; Luke & Bailey, J. Manger & Son, Ltd., and Middleton Bros., for soda, aluminium sulphate, ammonium sulphate, etc.; Jeyes' Sanitary Compounds Co., Ltd., and Alfred C. Young & Co., for disinfectants; W. H. Palmer & Co., Ltd., for methylated spirit; Maurice P. Hunt & Co., for soap for three months; Bovril, Ltd., for extract of beef to certain asylums for three months; Palmer & Co., Ltd., for soft soap to certain asylums for four months.—The Stores Committee report that, owing to inability on the part of the contractors to supply, the following contracts have been terminated during the past three months: *Chemicals*—Harrington Bros., Ltd. (schedule items 2, 14, 73, 96, 99, 110, 126, 127, 135, 164, 165, 167, 168, 178, 198, 200, and 233); Johnson & Sons (items 108 and 144); W. Martindale (item 142). *Chemical and*

Physical Apparatus—Falk, Stadelmann & Co. (item 109); A. Gallenkamp & Co., Ltd. (items 17, 18, 19, 21, 22, 23, 24, 40, 48, 79, 80, 91, 92, 93, 94, 95, 96, 97, 110, 135, 140, 165, 183, 185, 186, 187, 208, 213, 218, 232, 236, 260, 279, 280, 281, 294, 295, 298, 390, 405, and 406); W. H. McCarthy & Son (item 368); A. W. Quaintance (items 201 to 206); Townson & Mercer, Ltd. (items 2, 6, 23, 30, 61, 65, 71, 76, 115, 123, 131, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 161, 162, 163, 164, 171, 172, 173, 174, 176, 177, 178, 188, 209, 211, 219, 222, 225, 226, 227, 228, 231, 233, 243, 255, 275, 284, 291, 296, 297, 299, 329, 330, 372, 401, 408, and 415).

West Ham Education Committee has decided to ask the present contractors on what terms they will be prepared to supply disinfectants for a further period of one year, after the expiration of the existing contracts on March 31.

The Health Committee of Chislehurst Urban District Council has reported to the Council that as formaldehyde is not now procurable at the former price of 4s. 3d. per gal., the contractors had offered to supply American formaldehyde at 5s. 3d. per gal. Pending the decision of the Council, the inspector was instructed to purchase small quantities as required.

Sheffield.

Pharmacists will miss the prescriptions of Dr. Risely through his unfortunate illness, but will learn with pleasure that the Governors of the Royal Hospital have honoured him by placing him on the honorary consulting staff.

Mr. H. Antcliffe, chemist and druggist, has been elected President of the South Yorkshire Poor-Law Officers' Association. Mr. Antcliffe is the first pharmacist to hold office as President of a branch of the National Association.

Influenza has been prevalent in Sheffield lately, and several chemists have made window-displays of influenza-mixtures, etc. Unfortunately, Mr. C. H. Hewitt, Secretary of the buying section of the local Association, has been the victim of a sharp attack, but is now convalescent.

We regret to announce that Mr. G. W. T. Newsholme, Ph.C., is laid aside through overwork. He has just completed a combination scheme for the treatment of the feeble-minded, in regard to which the Local Government Board Inspector has said that in a few years it would stand as a pioneer movement. Mr. Newsholme is now on the road to recovery.

The local branch of the Incorporated Society of Pharmacy and Drug-store Proprietors, Ltd., held their first meeting of the year at the King's Head Hotel, Sheffield, when Mr. Norman D. Vine (Leeds Secretary of the Society) addressed the members. Officers for 1915 were then elected by ballot, and arrangements were made for a whist-drive to be held at an early date.

West Bromwich.

With the object of reducing the infantile mortality in the borough, an Infants' Welfare Society has been inaugurated by Mrs. J. A. Kenrick, at which instruction will be given to mothers on the care of infants and the preparation of food for infants and invalid children.

The Infectious Diseases Hospital is to be extended at a cost of 2,100*l*. The Local Government Board inspector has held an inquiry into the circumstances, and the necessary loan has been applied for. The first part of the scheme provides for the accommodation of twelve persons.

The following is a selection from the local price-list. The prices are subject to revision as may be found necessary:

Saltpetre, 2 oz. 1*½*d., 4 oz. 2*½*d., 8 oz. 4*½*d., 1 lb. 8d.; potass. bromid., 1 oz. 5d., 2 oz. 9d.; potass. citras and sodii citras, 4*½*d. per oz.; camphor (fours), 2 for 1*½*d., 4 for 3d.; syrups, 1 oz. 1*½*d., 2 oz. 2*½*d., 4 oz. 4*½*d. (by weight); citric acid, 1 oz. 4d., 2 oz. 7*½*d.; boric acid (pulv. et cryst.), 1 lb. 8d., 8 oz. 4*½*d., 4 oz. 2*½*d.; tinctures and spirits, all above 4d. per oz., except tinct. quinin. ammon., 3*½*d. per oz.; glycerin, 4 oz. 6d., 8 oz. 11d.; senna (fol. et fruct.), 4 oz. 4*½*d., 2 oz. 2*½*d., 1 oz. 1*½*d.; acetosalicylic-acid tablets, 3*½*d. per doz.; bismuth carb., 1 oz. 1s. 2d.; troch. bismuthi, 1 oz. 3d., 4 oz. 10*½*d.; "Dartring" lanoline, 7*½*d. and 1s. 3d. per tube; sod. sulph. effervesc., 4 oz. 6*½*d.,

2 oz. 3*½*d., 1 oz. 2d.; potass. bicarb., 1 oz. 1*½*d., 2 oz. 2*½*d., 4 oz. 4*½*d.; quinin. sulph., 20 grains 3d.; phenacetin tablets (plain and compound), 25. 6d., 100, 1s. 4d., 1 doz. 4d.; chamomile-flowers, 1 oz. 2d., 2 oz. 3*½*d., 4 oz. 6d.; ferri et quinin. citras, 1 dr. 3d.; cream of tartar, 1 oz. 2d., 2 oz. 3*½*d.; health salt, tins 4d. and 7*½*d.; tartaric acid, 1 oz. 2d., 2 oz. 3*½*d.; turpentine, 6*½*d. per pint; potass. permang., 1 oz. 2d., 2 oz. 3*½*d., 4 oz. 6*½*d.; potass. iodid., 1 dr. 3d., 1 oz. 1s. 6d.; sacchar. lact., 1 lb. 2s., 1 oz. 2d., 2 oz. 3*½*d.; compound liquorice-powder, 4 oz. 4*½*d., 2 oz. 2*½*d., 1 oz. 1*½*d.; sodii salicyl., 1 oz. 6d. Mineral waters: Apenta, 1s. 2d.; Contrexéville, 1s. 1d.; Friedrichshall, 1s. 6d.

A Stevens' Consumption-cure Witness.

At Bow Street Police-court, London, on January 25, a charge of perjury was preferred against Arthur A. H. Bennett, who gave evidence in the Stevens' Consumption-cure case in July (*C. & D.*, July 25, p. 115). Detective-inspector Birch, of Scotland Yard, said he saw the accused detained at Gravesend on Sunday, and asked him if his name was Alfred Hy. McFee. He replied that his name was Bennett, and added, "I was born at Tambourroora, New South Wales, in 1861. I have no legal claim to the name of McFee." Among some documents in his possession was a draft memorandum of agreement in the name of Arthur Alfred Hy. Bennett McFee. The accused was remanded, it being stated that the case is in the hands of the Director of Public Prosecutions, who will be represented on the next occasion.

[The accused in his evidence last July stated that he had been in practice in South Australia for twenty-two years. The only one of the name given on the Medical Register is Alfred Henry Bennett, M.B., C.M. (Aberd.), 16 North Terrace, Adelaide, South Australia. The accused stated that subsequent to the twenty-two years in Australia he went to Liberia, and was described as a Commissioner under the Government of Liberia. He produced a specimen of the plant from which the Cure was said to be made. Dr. Bennett was registered on May 4, 1891.—EDITOR *C. & D.*]

Irish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Brevities.

The annual meeting of the Ulster Drug Trade Association has been fixed for February 3 in Belfast.

Mr. F. T. Smith, registered druggist, Antrim, has been elected Chairman of Antrim Town Commissioners.

Mr. James E. Cooke, Ph.C., the Medical Hall, Gorey, has been elected, at the head of the poll, a Town Commissioner for Gorey.

It was reported at the last meeting of the North Dublin Board of Guardians that during the year 189*l*. had been paid for substitutes for dispensers, of which 40*l*. had been recouped by the Local Government Board.

The Belfast Board of Guardians last week considered the report of the Finance Committee regarding the applications for increased salary from the dispensers, Mr. J. D. Hamilton, Mr. Joseph Ritchie, and Miss Mary E. M. Logan. The Board refused to grant any increase.

Creditors of the late Professor Patrick Kelly, Ph.C., owner of the Richmond Medical Hall, Portobello, Dublin, who died recently, are asked to furnish particulars of their claims to Mr. W. Coulter, solicitor for the administratrix of deceased. A distribution of assets is to be made on February 18.

At the request of the Medical Board of Sir Patrick Dun's Hospital, Dublin, Mr. Victor E. Hanna, Ph.C., The Prescription Pharmacy, 70 Lower Mount Street, Merrion Square, Dublin, has taken up the position of pharmacist to the hospital. Mr. Hanna began his duties on December 1, 1914, and is now engaged in remodelling the hospital pharmacy.

Contra Account Dispute.

At Ballyconnell County Court last week, an action was brought by Alexander Macnaughten, registered druggist, Belturbet, against Phair Brothers, Ballyconnell, for 6*l*. 13s. 6d. for work done and material. There was a

cross-action by the defendants, who are coachbuilders, to recover 5*l.* 9*s.* 6*d.* for work and labour done. Plaintiff stated that 6*l.* 13*s.* 6*d.* was the balance of an account due by defendants; it included sets of false teeth supplied. He denied that he agreed to supply the teeth at 2*l.* each set. He was a qualified druggist, but not a dentist. He obtained the teeth for defendants from a London firm of dentists. Defendants gave evidence regarding the supply of dentures, but disputed that any balance was due. After other evidence Mr. Smith, for plaintiff, said the *contra* account against Macnaughten was admitted. He was entitled to a decree for 1*l.* 4*s.* on the balance. Judge Brown, however, dismissed the first case on the merits; in the cross-action a decree was granted for the amount claimed.

Poisoning Case.

The inquest on Dr. J. P. Bourke, Killaloe, co. Clare, was resumed on January 22 (*C. & D.*, January 16, p. 38). Deceased attended Dr. Ryan who was ill and drank in mistake for whisky some aconite liniment which had been transferred from a cracked bottle to another bottle labelled whisky. Dr. Ryan, who also drank some of the poison, has recovered, and gave evidence. Dr. Bourke was taken ill soon after leaving Dr. Ryan's house, and died about four hours afterwards. A verdict of accidental poisoning was returned, the jury adding that Dr. Ryan should be censured for keeping poison in a bottle labelled whisky.

Scottish News.

Subscribers are invited to send to the Editor newspapers containing matters of trade interest. The items should be indicated.

Aberdeen and the North.

Mr. G. A. McGregor, chemist and druggist, Duftown, has been appointed chemist to the Duftown Upper District Isolation Hospital for the year commencing February 1.

Dr. J. F. Tocher and Professor Hendrick have been appointed representatives of the North of Scotland College of Agriculture on the Board of the Scottish Milk Records Association.

Edinburgh.

Mr. James B. Mitchell, chemist and druggist, 58 South Clerk Street, has now recovered from an illness of nine weeks' duration.

The directors of St. Cuthbert's Co-operative Association, Ltd., have agreed to supply medicine, etc., to the dependants of soldiers and sailors on active service.

At the annual meeting of the George Square Ward Municipal Association on January 20, Mr. James Mackenzie, J.P., Forrest Road, was elected President and Mr. J. A. Forret one of the auditors.

Apparently as an afterthought of the recent quack-doctors' trials a mild discussion is going on in a local newspaper regarding the iniquity of practitioners who lack the M.D. degree styling themselves doctors.

Dr. George Lovell Gulland, brother of Mr. J. W. Gulland, M.P. for Dumfries Burghs, and Chief Liberal Whip, has been appointed to succeed Dr. John Wylie as Professor of Medicine in the Edinburgh University.

The competition for the Rainy Brown Golf Trophy, which is held annually in May between teams of pharmaceutical golfers representing Edinburgh and Glasgow, has been postponed owing to the war. The trophy is at present held by the Edinburgh team.

A glance over the new doctors' panel shows that National Insurance physicians are still bent on enjoying (if possible) a peaceful half-holiday. The promise that pharmacists who desired to give night attendance would be duly noted in the chemists' panel does not appear to have been taken advantage of.

At a meeting of the Rotary Club on January 21, Principal Lawrie, F.I.C., F.C.S., of the Heriot-Watt College, stated, in reply to a question as to whether he considered Edinburgh a suitable centre for the manufacture of

chemical products, such as Germany produced, that he cannot see why the Scottish capital should not be a manufacturing centre for fine chemicals. They had already very important pharmaceutical manufactories, and they have any amount of scientific knowledge for developing such an industry.

A correspondent of "The Scotsman," in an article on the new Pharmacopœia, states that the work as a whole shows many improvements which deserve praise, but it cannot be taken as an index of the progress of this branch of medical science during the past few years. The author regrets that the research work carried out in our Universities and Pharmacy Schools receives such scant recognition. Mention is made of the new synthetic chemicals introduced, and some of the alterations in strength of the galenical preparations are noted. The increased strength of laudanum is welcomed as tending to reduce the free sale of this preparation, to the benefit of the community. The tests for purity of chemicals and the non-inclusion of vaccines, etc., are discussed, regret being expressed at the absence of any mention of these modern aids to treatment. Respecting the introduction of the metric system, the writer regards the nomenclature as unfortunate, and considers that this will be a strong deterrent to its general adoption. In conclusion, it is stated that the conservative spirit in which this edition has been revised is perhaps the most noticeable feature, and the one which is the least likely to disturb the equilibrium of the doctor or chemist.

Mr. Thomas Stephenson, Ph.C., endorses these remarks ("Scotsman," January 23), and states that now certain synthetic drugs are in the B.P. the official name is quite good enough to secure a pure article.

Fife.

Chemists and druggists with windows facing the sea were last week visited by a member of the County Constabulary, who informed them that their "lights must in future be dark."

With the epidemic of influenza there has been a demand for chemist locums, but the locum is conspicuous by his absence. Not one is to be got, so many young fellows having joined the Colours. Medical locums command an extraordinary figure; 8*l.* per week is being paid them. Ten to fifteen years ago 2*l.* was the figure.

French News.

(From the "C. & D." Paris Correspondent.)

M. RAOUL GUYON, who had a pharmacy at Paris (21 rue Sainte Apolline) and was mobilised as an assistant pharmacist-major of the French army, was killed by a German shell at Rheims on November 22.

M. BARDOU, pharmacist, 14 rue l'Apport-au-Pain, Senlis, was one of the hostages taken by the Germans when they destroyed or burnt many streets of that town, one of the nearest points to Paris occupied by the enemy during their advance in August and September. The barbarous treatment to which the hostages were subjected, and the fact that six of them (including M. Odent, Mayor of Senlis) were shot, will still be fresh in the memory of all who read the details at the time. M. Bardou was lucky enough to escape.

THE PHARMACEUTICAL GROUP of the French Parliament, composed of senators and deputies who are pharmacists or ex-pharmacists, held a morning meeting at the Palais Bourbon (Chamber of Deputies) on January 16, Dr. Cazenave presiding. Every member of the group was present. According to the text of the law drawn up by the Senatorial Army Committee (Article 7, revised by M. Paul Doumer's supplementary report) the group decided to petition the Minister of War to grant to qualified pharmacists and pharmacy students "of twelve inscriptions"—i.e., eligible for diploma examination—the privileges already accorded to doctors and medical students. Should the number of pharmacists and students mobilised be larger than the number of vacant posts of assistant and auxiliary pharmacist-majors in the army, the group will ask the Minister to utilise them in the

hospitals as *infirmiers* (male nurses or orderlies) in preference to men who, having no connection with the healing art or knowledge of maladies, are less suitable for such special duties.

ARMY PHARMACISTS.—An important notice regarding promotions in the pharmaceutical branch of the French military sanitary service appears in the "Journal Officiel." A certain number (over 600) of second-class assistant pharmacist-majors of the Reserve who can count more than two years' service, and a still larger number (about 650) of Territorial pharmacists of the same rank who have served over four years, are nominated first-class assistant pharmacist-majors—*i.e.*, are promoted from the grade of sub-lieutenant to that of lieutenant. Such a general and widespread recognition of the services of the pharmaceutical branch is unusual—I believe unprecedented.—I dined the other night with a pharmacist fresh from the Front enjoying a well-earned holiday here in Paris. He had acted as ambulance doctor, statistical officer, and interpreter, as well as executing his regular pharmaceutical duties. Such a useful class of men can hardly be grudged an extra stripe on the cuff and kepi when one considers how often they leave a comfortable home and moderately prosperous business and risk serious financial in addition to the ordinary war dangers.

THE PARIS RETAIL PHARMACISTS' ASSOCIATION (*Chambre Syndicale des Pharmaciens de la Seine*) calls attention to the unprecedented (*inouïe*) conditions in which the retail trade is at present placed. The men hitherto temporarily refused for army service ("*exemptés*" and "*réformés*," in military parlance) have now been summoned for medical examination, and such as are considered fit have been or are being embodied for the auxiliary services or otherwise. I personally know a young man who, after having been "turned back" four times for defective eyesight, is now so engaged. The class of young men from which pharmacists could draw temporary assistants to replace such of their regular employés as had joined the Colours is thus once more reduced, and the problem of auxiliary labour is more difficult to solve than ever. An untrained man is of little use in a pharmacy, and above all (the Association points out) in a Parisian or city *officine*, where the diversity of prescriptions is almost unlimited. A long experience and a thorough knowledge of the trade is in such situations practically indispensable. On the other hand, large numbers of the younger master pharmacists have been medically re-examined in the same way, and may be summoned at any moment for service. Should any epidemic break out in Paris—and in war-time one must be prepared for the worst, though one hopes for the best—the consequences of this reduced staff of pharmacists might be serious. We have also to face the fact that in winter and bad weather the normal calls on the pharmacist increase. The Association asks whether pharmacists already enrolled could not be granted suitable and reasonable leave, and if a "*sursis*" or adjournment could not be granted to such pharmacists and assistants as have not yet been called up. The application of the "*sursis*" is a familiar feature to every Parisian. It is granted, as far as possible, to agricultural labourers at harvest-time and to men who are engaged in "season" trades. It was largely extended to operative bakers when the present war broke out. There is therefore nothing revolutionary or extraordinary about the pharmacists' modest request, and it is to be hoped it will at least be very seriously studied by the military authorities, and an attempt made to reconcile the two ideas of universal service and "business as usual," at least so far as dispensing is concerned.

SWEDEN.—At the annual meeting of the *Apotekarsocietet* at Stockholm, A. Kayser was elected Chairman, K. Sjöberg Secretary, and C. O. W. Schimmelfennig Treasurer. The meeting agreed to contribute 1,200 kr. towards the publication of a history of Swedish pharmacy, 500 kr. for a post-graduate course for pharmacists, and 1,000 kr. to the Bureau at Upsala for supplying information regarding advertisements of medicaments.

Australasian News.

"The Chemist and Druggist" is supplied weekly to all the members of nine Chemists' Societies in Australia and New Zealand.

The Commonwealth.

TARIFF INQUIRY.—Giving evidence before the Interstate Commission, Mr. L. R. Scammell, of F. H. Faulding & Co., asked for a lower Excise-duty on raw materials used for spirituous preparations. The difference of a shilling duty per proof gal. between Australian spirit and the imported article was not sufficient to enable them to face English, American, and German competition. A decrease would enable them to make concentrated infusions, medicinal tinctures, and food-extracts. He favoured the reduction of the Excise-duty from 15s. to 10s. per proof gal.—At Melbourne, Mr. R. E. Wood, business-manager of Felton, Grimwade & Co., asked for a revision of the tariff in regard to spirituous preparations, simplifying the charge and making it 7s. per proof gal. under 25-per-cent. strength and 20s. per proof gal. above 25-per-cent. strength. On pharmaceutical preparations the tariff should be 35 per cent., and on toilet-requisites an increase from 25 and 30 per cent. to 35 and 40 per cent. The present preferential tariff was only a revenue-producing tariff. They did not look to the factory to show a profit, although, as a matter of fact, it showed a small one, due principally to one or two reasons which were explained. Ether and chloroform and many other lines were hard to obtain under present conditions. Though the firm were ready to undertake the manufacture of these and other goods, they were loth to invest some thousands of pounds in plant only to find that shortly after the war had ceased Australia was again the dumping-ground of products produced on the Continent under cheap-labour conditions. Ether and chloroform were admitted free, and protection must be assured to make it worth while to instal new and additional plant.

New South Wales.

PHARMACY BOARD.—At the December meeting Mr. Harry Evans and Mr. F. H. Jones, chemists and druggists with the British qualification, were registered under the Pharmacy Act.

PHARMACEUTICAL SOCIETY.—At the meeting on December 10 it was reported that 168l. had been collected for the Patriotic Fund organised by the members of the Council. It was suggested that a motor-cycle ambulance might be purchased and presented to the Red Cross Society.

DOCTOR'S DISPENSING.—Dr. A. W. Wigmore, of Kurri Kurri, has been committed for trial on a charge of manslaughter. He administered to a child of nine months old a quantity of pulv. ipecac. co., which he guessed, in mistake for pulv. jalap. co. He stated at the Coroner's inquest that if another doctor had not been called in he would have given a certificate of death from pneumonia.

NECESSARY COMMODITIES COMMISSION.—This Commission, which is inquiring into the prices of commodities affected by the war, on October 29 examined drug-trade witnesses. Mr. Holmes, acting-manager of Parke, Davis & Co., Sydney, stated that out of 4,000 to 5,000 preparations it has only been found necessary to advance the prices on 50 to 100 lines from 25 to 50 per cent. These are almost exclusively opium-preparations. The company have supplied all orders for public bodies at prices ruling before the outbreak of war. It had been necessary to limit customers' orders to actual requirements even in those cases where prices have been advanced. Mr. A. B. Hector, manager for Burroughs Wellcome & Co., Sydney, said his firm had advanced the prices of about 1,000 lines by 25 per cent. For the bulk of their goods the prices were not advanced. The advances in price took place chiefly after October 1, the object being to conserve their stocks, as in replacing them much higher prices had to be paid. It was necessary to adopt a policy tending to conserve stocks. Orders could have been restricted at the old prices, but this would not have been so effective in checking undue buying. A good many of the firm's products are made at Sydney for the Australian trade.

Victoria.

MOTOR-AMBULANCE.—The retail chemists of Victoria raised 501l. for the purchase of a motor-ambulance, which has been presented to the Defence Department for use in the war. The idea of the Victorian Retail Chemists' Patriotic Fund originated with Mr. C. E. Towl, and a Committee carried out the work of collecting the money. The Lord Mayor of Melbourne on November 26 made the presentation of the motor-ambulance to the military authorities.

Canadian News.

(From the "C. & D." Correspondent.)

HABIT-FORMING DRUGS.—Cocaine-takers give a lot of trouble in Canada, and the "British Columbia Pharmaceutical Record" urges chemists to be careful that prescriptions they receive for narcotic drugs are genuine. That this is necessary is proved by the fact that a drug "fiend" at Vancouver has been sent to gaol for three months for forging a prescription for cocaine solution in the name of a well-known medical man. A chemist to whom the prescription was taken detected the forgery.

CHEMICALS EXPLODE.—Two explosions of chemicals on New Year's Day severely damaged the office and warehouse of Lyman's, Ltd., wholesale druggists, Montreal. The first explosion occurred at noon in a vault beneath the premises, and while the firemen were extinguishing the fire which resulted a second explosion took place. This caused a fire among a pile of bags of sulphur, and the sulphur-dioxide fumes made the firemen's task a difficult one. The fire, however, was confined to the basement. Mr. A. Lyman, the vice-president, put the cause of the fire down to spontaneous combustion. The damage done is estimated at \$5,000.

WOOD-PRESERVATION.—The preservation and fireproofing of wood was the subject before the January meeting of the Canadian Section of the Society of Chemical Industry. Before the meeting began a discussion took place on the means of promoting chemical-industries in Canada, and a Committee, consisting of Mr. T. H. Wardleworth, Dr. R. F. Ruttan, Dr. Milton Hersey, Mr. J. A. De Cew, Mr. C. F. Bardorf, and Mr. A. G. Spencer, was appointed to investigate the matter and report to the Section. The papers on wood-preservation were from the staff of the Forest Products Laboratories of Canada, which was established in 1913 in co-operation with the Government and the McGill University. The main use for preserved wood in Canada is for railway-sleepers, of which one speaker said there are approximately a hundred millions in use. If these could be effectually preserved against rot there would be an annual saving of a million dollars.

Our American Letter.

(Special Correspondence to the "C. & D.")

Professor Cash, of Aberdeen University, who is at present on sick-leave, passed through New York in the first week of January, along with Mrs. Cash and two daughters, to visit relations in Delaware.

Obituary.—Mr. George Merrell, president of the William S. Merrell Chemical Co., died at Cincinnati in December, aged sixty-nine. His father, Dr. W. S. Merrell, who had a drug-business, in 1847 discovered and introduced podophyllin and podophyllum resin, in the next year the alkaloids and salts of hydrastis and sanguinaria. George Merrell became a partner in the business before he was twenty-one, and had been president since its incorporation.—Mr. Edward H. Hance, founder of the drug and chemical firm of Hance Bros. & White, Philadelphia, also died last month. He was eighty-one.

Chemical Trade.—Dr. W. H. Nichols, chairman of the General Chemical Co., in an address to the American Association for the Advancement of Science, stated that the European War has had but little injurious effect upon the American chemical-trade. He said: "We import sulphur in the form of pyrites, nearly all of our potash, all of our tin, nickel, and nitrate of soda, but with the Allies in command of the sea the war has not affected any of these raw materials greatly, except potash. . . . Some heavy chemicals, the receipt of raw material for which has been very much curtailed or stopped altogether, have advanced sharply in value, but, generally speaking, the chemical-industry has not profited by advanced prices." Dr. Nichols states that so far the United States has failed to utilise its natural deposits of raw materials for the chemical-industry. He also declared that foreign manufacturers and exporters are utterly unscrupulous in the methods adopted by them to gain control of foreign trade, and he was of the opinion that the only way in which the United States might successfully compete would be in the co-operation between the Federal Government and the exporting manufacturers of the country.

Sale of Proprietary Medicines.—The Board of Health of the City of New York have made an ordinance, to take effect after December 31, 1914, forbidding the sale of pro-

prietary or patent medicines in New York until the names of the ingredients have been registered with the Department of Health. This ordinance has naturally called forth vigorous protests from the drug-trade, and on January 7 a deputation visited the Board of Health to protest against the ordinance. Dr. W. C. Anderson, Dean of the Brooklyn College of Pharmacy, protested that the ordinance was not required to protect the public welfare, which is already amply protected by existing laws; that the ordinance undertakes a confiscation of private property, and that it denies to the people the right to exercise their own discretion regarding the purchase of remedies, and thus attempts to compel the people to consult a physician for every trifling ailment. He also accused the Board of lending itself to the campaign of the American Medical Association against self-medication. Mr. Albert Plaut, of Lehn & Fink, said that 40 per cent. of the business of wholesale druggists in the city would be affected by the ordinance. The matter is one which should be dealt with nationally, not locally. Dr. Jacob H. Rehfuess said that the owners of proprietary remedies are not going to give up their secrets at the behest of a local Health Board. The ordinance would only drive people to purchase outside the city by means of the post. Other speakers were Mr. H. R. Strong, who denounced the medical "trust," which doctors seek to enforce; Alderman Jacob Weil, Mr. S. C. Henry, and Dr. O. Raubenheimer. The last-named stated that Haarlem oil, Rochelle salt, bicarbonate of soda, and Warburg's tincture were all originally patented articles. Further conferences have since been arranged in an endeavour to get the ordinance repealed or modified.

Netherlands Notes.

(From the "C. & D." Correspondent.)

Rubber Research.—A central laboratory for rubber research is to be founded in Java as a result of discussions at the International Rubber Congress.

The Annual Price-lists of the Dutch wholesale drug and chemical trades have, most of them, not been published this year on account of the repeated changes in the prices of these articles at present.

Belgian Students.—The Minister of the Home Department has allowed ten Belgian students to attend, without paying fees, the lectures and practical laboratory-work in the Technical University in Delft.

Sunday Closing.—Alternative Sunday closing is now practised in fifty-four municipalities in Holland. In four of them it was introduced in the course of 1914. In one municipality the practice has been repealed.

Opened by Censor.—In a letter from England to Holland the following printed note was enclosed by the Censor: "Letters are more likely to pass the Censor expeditiously if they are short and clearly written."

Standardised Digitalis.—The Department "Amsterdam" of the Nederlandsche Maatschappij ter Bevordering der Pharmacie has its own farm at Noordwijk, near Leiden, for the cultivation of digitalis-leaves. Each year the whole harvest is well mixed and reduced to coarse powder, which is distributed among the members after it has been chemically and physiologically examined, a note of the potency being printed on the labels. This year, however, the digitalis has not yet been distributed. The reason is that on account of the prohibition of exportation of animals for physiological researches from Germany it has been impossible to standardise the powder. Holland, which is so rich in frogs, does not produce the *Rana temporaria* that is required for physiological standardisation.

"N.O.T." is the abbreviation which has been adopted for the Nederlandsche Overzee Trust Maatschappij, the formation and objects of which were outlined in the *C. & D.*, November 28, 1914, p. 70. The company has issued a circular, in which it is stated that the Nederland Steam Navigation Co., the Rotterdamsche Lloyd, and the Dutch Steam Navigation Co. "Ocean," have decided not to accept for transport to Holland cargoes of articles considered to be contraband of war, unless these are consigned to the N.O.T. It is further advised that goods in the category of contraband which are on the way should be re-consigned to the N.O.T. to ensure them reaching their destination. A list of articles which can be freely imported into Holland is appended to the circular. These include volatile oils, alcohol, cassia, coca-leaves, cubebs, mace, indigo, cinchona-bark, quinine, cloves, nutmegs, castor-oil seeds, and cinnamon. All other articles should be addressed to the N.O.T., with the exception of mineral oils and copper, which should be consigned to the Dutch Government.

Legal Reports.

Trade Law.

A Debt Case.—At Aecrington County Court, before Judge Mansfield, on January 21, Bowdler & Biekerdike, manufacturing chemists, Church, recovered 6*l.* 7*s.* 10*d.* for disinfectants sold to E. Martin & Co., Manchester.

Removing Acetic Acid from Tar.—In the City of London Court, before Judge Rentoul, K.C., on January 27, The Eastern Enterprises, Ltd., Suffolk House, Laurence Pountney Hill, E.C., sued Mr. Hans Wiedermann, Heathwood, Park Drive, Golders Green, for 9*l.* for treating one half-ton of tar delivered by them, and freeing it from acetic acid to a point below 0.5 per cent. Defendant said that the debt was not his. It was due from Baumgarten, of Berlin. Plaintiffs' counsel said that the defendant was the principal and the only man they knew in the matter. Judge Rentoul, in the course of the hearing, said the law in this country is that the person to whom the credit is given has to pay. The defendant seemed to have done everything in the case, and had made himself liable. Judgment for the plaintiffs, with costs.

Claim for Commission.—Mr. Justice Shearman, in the King's Bench Division on January 25, heard a claim for commission by Edward A. Hearn, glass-bottle traveller, Dalston Lane, Hackney, against Charles Olley & Sons, glass-bottle manufacturers. Mr. Spokes, for the plaintiff, stated that the claim was for an account of commission, which was due to the plaintiff on all moneys received by or payable to the defendants in respect to goods supplied by them to C. J. Hewlett & Sons, Ltd., wholesale druggists, Charlotte Street, London. Plaintiff, in evidence, stated that he was a glass-bottle manufacturer prior to 1905, when he commenced business as a commission-agent, and was instructed by the defendants' firm to obtain orders for them, at the rate of 5 per cent., for the sale of corks. The arrangement was made with Mr. J. J. Olley, the senior partner in the defendants' firm, whom he told that he thought he could get a fair amount of orders from Messrs. Hewlett & Sons. Mr. Olley stated that he had done business with Hewlett's some twenty years ago, and he seemed rather anxious to resume the business. There was no limitation of commission on any of the orders; the defendants promised to pay him 5 per cent. on all orders. Plaintiff received the commission up to the end of 1903, but since then he had not received any. The plaintiff on one occasion met Mr. Olley and asked him for his commission for all orders they received from Messrs. Hewletts. Mr. Olley said that he was doing practically no business with Hewletts, and there was no account due. Plaintiff spoke of calling upon Mr. Hicks, a buyer of Messrs. Hewletts, who introduced him to Mr. Street, another buyer, who promised to send some orders on. Orders were sent on by post, and defendants told plaintiff that he need not call for the orders as it would make no difference to his commission. Mr. Spokes proposed to call two commercial travellers as to the custom, but Mr. J. C. H. Sproule, for the defendants, objected to this being given in evidence without being put in the pleadings.—Mr. Sproule addressed the Court for the defence on Tuesday, stating that Mr. Hicks left Hewletts in 1907, but orders continued to come through his successor. Plaintiff was paid commission up to 1903, and since then one of the partners of the defendants' firm, Mr. John Olley, had to approach Hewletts to give quotations for the orders which had been received since. His Lordship, in giving judgment, said he must find that there was no written contract, and the plaintiff had failed to make out his case on the line of his pleadings. The action was dismissed, with costs, and the plaintiff was allowed 5*l.* as commission which was due to him.

Gazette.

Bankruptcy Acts.

RECEIVING ORDERS.

FIELDING, W. A., 116 Rochdale Road, Royton, Laneaster, drug-vendor.

ADJUDICATIONS.

FIELDING, W. A., 116 Rochdale Road, Royton, Laneaster, drug-vendor.

MICHAEL, F. W., 210 Camberwell Road, London, Bachelor of Medicine.

THORNLEY, N., 81 Alexandra Road, Moss Side, Manchester, chemist and druggist.

Limited Companies.

New Companies Registered.

P.C. means Private Company and R.O. Registered Office.

EASTERN DENTAL MANUFACTURING Co., LTD. (P.C.).—Capital 1,000*l.* The first directors are B. de Q. Quincey, L. W. Gill, and E. J. Kimber.

CHEMICAL EXPLORATION Co., LTD. (P.C.).—Capital 1,506*l.* 5*s.* The first directors are R. W. Greeff (chairman), F. W. Passmore, E. Lange, and A. Lynn. R.O., Thames House, Queen Street Place, E.C.

REITMEYER, CALBURN & KINDERSLEY, LTD. (P.C.).—Capital 50,000*l.* Objects: To carry on the business of chemists, druggists, manufacturers, importers and exporters of and dealers in chemicals, etc. R. Reitmeyer is permanent governing director. R.O., 63 Crutched Friars, E.C.

EUROPEAN-AMERICAN TRADING Co., LTD. (P.C.).—Capital 10,000*l.* Objects: To carry on the business of contractors for the supply of, *inter alia*, drugs, chemicals, and to trade as chemists and druggists, etc. The subscribers are W. Wright (45 Parkside, Knightsbridge, S.W.) and W. S. Wright.

EVAN JONES, SON & Co., LTD.—Capital 2,000*l.*, in 1*l.* shares. Objects: To take over the business of a wholesale druggist, patent-medicine vendor, tobacconist, confectioner, and general grocers' sundriesman, seed-merchant, etc., carried on by P. Jones at the Red House Pharmacy, Cowell Street, Llanelly, Carmarthen, as "Evan Jones & Son." The first directors are P. Jones, E. Jones, and Mrs. L. Jones.

Company News.

LIEBIG'S EXTRACT OF MEAT Co., LTD.—The directors have resolved to declare an interim dividend of 10 per cent., free of income-tax, on the ordinary shares.

THE PHENIX CHEMICAL Co., LTD., whose registration was reported in the *C. & D.*, January 16, p. 41, is, we understand, to engage in the production of cream of tartar and tartaric acid from the imported raw materials.

STRAND CHEMICAL Co., LTD.—In the Chancery Division of the High Court, London, on January 22, Mr. Justice Joyce was asked to appoint a receiver and manager of this company. He agreed to make the order, subject to the condition that the company (which did not appear) might move to discharge it.

JOSEPH CROSFIELD & SONS, LTD.—The report for the year ended November 30, 1914, states that of the balance of profit after payment of dividend on the preference and ordinary capital, the directors recommend that 20,000*l.* be placed to reserve, writing off 20,000*l.* against depreciation and leaving 10,086*l.* to be carried forward.

GERMAN DYE COMPANIES.—Twenty companies with limited liability are engaged in Germany in the manufacture of aniline and other synthetic dyes. The share capital of these companies amounts to 146.6 million marks (a little over 7½ million pounds). The gross profits last year amounted to 54.5 million marks, the net profits being equal to a 25-per-cent. dividend on the shares.

PEARSON'S CASH CHEMISTS, LTD.—An application was made to Mr. Justice Astbury, in the Chancery Division of the High Court, London, on January 22, to adjourn for seven days a motion to appoint a receiver, in a debenture-holder's action, of the business of Pearson's Cash Chemists, Ltd., Aberfan, Rhondda Valley. It was explained by counsel that time was needed to consider evidence delivered on behalf of the company. A receiver had been privately appointed, but when he took possession he was ejected by the company's servants. The application was granted, an undertaking being furnished that the assets of the company should not be dealt with in the meantime except in the usual way of business.

A DOMESTIC CLINIC.—Husband: "Yes, I've been taking antipyrin for two months, four times a day." Friend: "That's rather risky, isn't it? Antipyrin is supposed to be so bad for the heart." Wife: "There is no doubt about that. I've noticed that it has a very hardening effect!"

"DIRECTORY OF BRITISH MANUFACTURERS FOR RUSSIAN TRADE." The Dorland Agency, Ltd., 3 Regent Street, London, S.W., inform us that this work will be closing for press shortly; also that they have established a Russian and Polish correspondence service to assist British manufacturers in dealing with Russian inquiries and general correspondence.

Bankruptcy Report.

Re Nathan Thornley, chemist and druggist, 81 Alexandra Road, Moss Side, Manchester.—A meeting of the creditors of this debtor was held at the Official Receiver's office, Quay Street, Manchester, on January 20. The debtor's statement of affairs showed gross liabilities amounting to 564*l.* 11*s.* 11*d.*, the whole of which is expected to rank for dividend. The assets were estimated to produce 171*l.* 4*s.*, and the deficiency was 393*l.* 7*s.* 11*d.* Shortness of capital and overstocking of shop were alleged by the debtor as the causes of his failure. The matter was left in the hands of the Official Receiver.

Deed of Arrangement.

Ellis, Oswald Malcolm, trading as the Rossendale Drug Co., 32 Manchester Road, Haslingdon, Chemist and Druggist.—Trustee: J. S. Smith, 36 Spring Gardens, Manchester, C.A. Dated, January 14; filed, January 21. Secured creditors, 25*l.*; liabilities unsecured, 1,053*l.*; estimated net assets, 134*l.* Among the creditors are the following: May, Roberts & Co., Ltd., London (12*l.*); Anglo-American Optical Co., London (4*l.*); E. Cook & Co., Ltd., London (4*l.*); Elliot Optical Co., London (6*l.*); Ford, Shapland & Co., London (4*l.*); Virol, Ltd., London (5*l.*); A. Wander, Ltd., London (4*l.*); Hirst, Brook & Hirst, Ltd., Leeds (91*l.*); Richardson & Co., Leicester (7*l.*); Ayrton, Saunders & Co., Ltd., Liverpool (21*l.*).

Private Meetings.

THE creditors of Francis C. Williams, chemist and druggist, Ealing (whose deed of arrangement was reported in the *C. & D.*, January 23, p. 41), met in London on January 20, when a statement of affairs was submitted. It transpired that the debtor took over the Ealing business in February last from his former employer, Mr. Goole. At that time he had no capital, and the purchase-price was fixed at 160*l.* Of that amount 125*l.* had been paid. Debtor is tenant of the premises, rented at 30*l.* per annum and taxes, but he sub-lets the house part at 39*l.* a year. The takings in the business have averaged about 10*l.* weekly, but they have latterly dropped to about 7*l.* a week in consequence of the present crisis. After some discussion, it was resolved that the debtor be allowed seven days within which to deposit security for the payment of 5*s.* in the pound, payable within three months, and secured to the satisfaction of the three principal creditors.

THE creditors of Oswald M. Ellis met at Manchester on January 19, when a statement of affairs was submitted. It was reported that the debtor started trading a little over two years ago, with very little capital. He did a fair business at the commencement, and it was believed that he had made a good profit during the first twelve months of his trading, after which he got into financial difficulties, and has executed a deed of assignment in favour of Mr. J. S. Smith (Messrs. Smith, Weir & Turner), the accountant, who convened the meeting. After discussion it was resolved that this should be ratified in order to protect the interests of the creditors, and also that if a composition of 5*s.* in the pound, payable in, say, three and six months, was forthcoming the same should be accepted.

Business Changes.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial approval.

MR. WILLIAM MARTIN HOWELL, of Hesse, is opening a branch pharmacy at Robin Hood's Bay.

THE FABBRICA CHIMICA ARENELLA SOCIETÀ ANONIMA, of Palermo, is the new style of the Fabbria Chimica Italiana Goldenberg. The company is a branch of Goldenberg, Geromont & Co., Rheingau.

THE BUSINESS of the late Mr. Fredk. Graf, drug-merchant, 65 Fenchurch Street, London, E.C., will be continued as hitherto under the same name by his brother, Mr. S. Graf (sole legatee and executor), who will retain the services of the staff.

White, E. F. *The "Spatula" Soda-water Guide*. 10½×7½. Pp. 160. \$1. ("Spatula" Publishing Co., Boston, Mass. [This is the fourth edition of this guide to the methods of conducting a soda-fountain. It deals with all aspects of the question, and contains a large number of formulae for compounding beverages for aerating.]

Personalities.

Authenticated notes are inserted without charge if not in the nature of advertisement, and subject to Editorial approval.

MR. S. R. ANNISS, Ph.C., London Road, Ipswich, has been appointed a member of the Borough Licensing Committee.

MR. VICTOR J. WOODS, chemist and druggist, Cecil Square, Margate, has been appointed organist of the Union Lodge of Freemasons.

MR. R. G. LAYBOURN, chemist and druggist, 39 High Street, Margate, has been elected President of the local Working Men's Club.

THE EARL OF BESSBOROUGH, who has been made Knight of the Order of St. Patrick, is a director of Bovril, Ltd., and of the Apollinaris Co., Ltd.

MRS. WELTON, wife of Mr. Henry Welton, chemist and druggist, Bishop Street, Coventry, was on Tuesday elected a representative of the City Council on the local Insurance Committee.

MR. FRED. BASCOMBE, F.I.C., Ph.C., Treasurer of the Great Northern Lodge and Secretary of the Galen Lodge, has been appointed Senior Warden of the Lambeth Borough Council Lodge.

COUNCILLOR HENRY M. LLOYD, J.P., chemist and druggist, ex-Mayor of Merthyr Tydfil, has been elected to the Court of Governors of the University College of South Wales and Monmouthshire as the representative, for three years, of the Merthyr Corporation.

LORD JUSTICE BANKES, who has succeeded the late Lord Justice Kennedy in the Appeal Court, once stood for Parliament as Conservative candidate for the Flintshire Boroughs, but he was beaten by Mr. T. H. W. Idris, J.P., F.C.S., chairman of Idris & Co., Ltd.

MR. A. R. ARROWSMITH, of the Apollinaris Co., Ltd. (who is well known in London in connection with many pharmaceutical social functions), informs us that the rumour that he has left that company, or that he contemplates so doing, is without foundation.

MR. JOHN GEORGE BECK, the internment of whose son (Mr. Ernest Beck, M.A. Lond.) in the British civil prisoners' camp at Ruhleben was mentioned in the *C. & D.*, January 23, p. 35, is proprietor of the Gustav Boehm business, 38 Morland Street, London, and not of the German business, which is a quite distinct concern.

MR. J. REYNOLDS, chemist and druggist, who has recently moved from Barry Dock to Mountain Ash, was entertained on January 13 to a complimentary banquet at Brain's Barry Dock Hotel, and presented with a gold watch and chain and an illuminated address, as a mark of appreciation and regard, from his fellow-members of the local May-Day Show Committee, of which body he has been chairman for several years.

New Books.

Any book published in the United Kingdom can be supplied to our subscribers at the price quoted. Orders, with remittance, should be sent to the Publisher, 42 Cannon Street, London, E.C.

RITTENBERG, M. *Modern Retailing*. 6½×4. Pp. 159. 1*s.* net. (Pitman, 34 Coombe Road, Croydon, S.E. [Mr. Rittenberg, an Australian by birth, was formerly editor of the "Organiser," and in that capacity had opportunities of studying various methods employed by successful retailers. The views thus gathered are digested and placed before retailers in this book. There are eleven chapters and two appendices. One of the chapters is headed "Principles of Window-display," and among the suggestions for an unconventional window-display for a chemist is to build an arch of toilet-soap to form the word SOAP.]

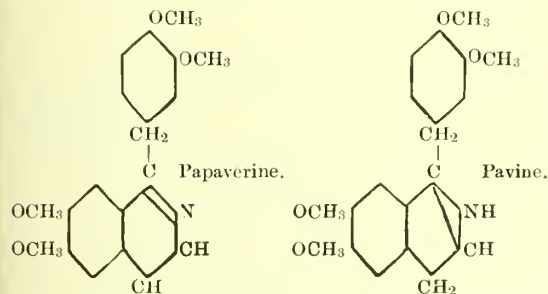
The Calendar of the Pharmaceutical Society of Great Britain, 1915. 8½×5½. Pp. 245+Appendix of Members' Names, Donors of the Benevolent Fund, etc. 2*s.* (Pharmaceutical Society, 17 Bloomsbury Square, London, W.C.) [This annual publication deals with the official matters of the Pharmaceutical Society. It gives in full the various Pharmacy Acts, by-laws, and examination regulations, etc., which govern the conduct of the Society. Particulars are also given of the Medical Benefit Regulations of the National Insurance Act, and full lists of the pharmacist members of the various Pharmaceutical Committees throughout Great Britain. In the latter lists the names of the Secretaries are underlined—a convenient method of indicating the distinction.]

Chemical Society.

ON Thursday, January 14, an informal meeting was held at Burlington House. The rooms were open to Fellows from 8 till 10 p.m., smoking was allowed, and refreshments were provided. These meetings are being well attended, and form a pleasant change to the usual scientific gatherings. As far as can be seen, they seem to be serving their purpose of making the Fellows better acquainted and affording an opportunity for discussion of a nature impossible at the usual meetings. On January 21 an ordinary scientific meeting was held, at which Professor W. H. Perkin, F.R.S. (President), was in the chair. The first paper was from the Wellcome Research Laboratory, by Mr. F. L. Pyman, on

ISOQUINOLINE DERIVATIVES.

The author stated that the paper was a continuation of work published some time back, and dealt with the reduction-products of papaverine. Papaverine, $C_{20}H_{21}O_4N$, yields on reduction two products—one, tetrahydropapaverine, which is amorphous, and the other, pavine, which is crystalline. Pavine, $C_{20}H_{23}O_4N$, is dihydropapaverine. From it may be prepared a methyl derivative, N-methyl pavine. It is an imino base and contains an asymmetric carbon atom. It is not reducible, and on carrying out a Hoffmann degradation on it a dicarboxylic acid, $C_{22}H_{27}O_5N$, is obtained. The author has carefully studied the behaviour of pavine and its methyl derivative, and concludes that the reduction of papaverine to pavine leads to an alteration in the molecule, which is best seen by comparing the two following formulæ, the latter of which he states to be the correct representation of pavine:



The next paper was by B. N. Ghosh and S. Smiles, on

SYNTHESIS OF 3-OXY-1-THIO-NAPHTHENE.

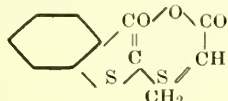
This was a development of previous work, where it was shown that by treating aromatic mercaptans with sulphuric acid disulpho compounds are obtained, such as $C_6H_5 \cdot S \cdot S \cdot C_6H_5$. When a solution of this in sulphuric acid is heated a further change takes place, giving rise to

bodies of the type $C_6H_4 \begin{smallmatrix} S \\ \diagup \quad \diagdown \\ \diagdown \quad \diagup \\ S \end{smallmatrix} C_6H_4$. The hypothesis adopted

to explain this was that the dithio group becomes broken by hydrolysis, giving rise to sulphylic acids, two molecules of which then condense. It was found that if thio-benzoic acid, $C_6H_5 \cdot SHCOOH$, be dissolved in sulphuric acid and the solution warmed, a compound of the

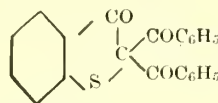
formula $C_6H_4 \begin{smallmatrix} S \\ \diagup \quad \diagdown \\ \diagdown \quad \diagup \\ O \end{smallmatrix} C_6H_4$ is obtained; following this up,

the action of acetoacetic ester was tried on thio-benzoic acid. In this case the ether is not formed, but hydrolysis takes place and oxythio-naphthene is formed. When excess of acetoacetic ester is employed further condensation takes place, and a body of the constitution

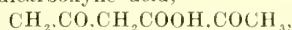


is obtained. By using acetyl acetone in place of acetoacetic ester a 90-per-cent. yield of oxythio-naphthene is

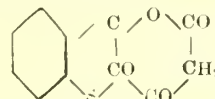
obtained; while with dibenzoyl acetone a good yield of the following compound is formed:



With acetone dicarboxylic acid,



a hydroxy-commarin is formed:



The last paper was by W. H. Caspari, and dealt with *The Behaviour of Colloids* towards mixed liquids, the special case treated being the conditions under which alcohol will precipitate indiarubber from its solution in benzene.

Winter Session of Meetings of Trade Associations.

(See also "Insurance Act Dispensing.")

Accrington.—The annual dinner of the District Pharmacists' Association was held at the Commercial Hotel, Accrington, on January 20, Mr. J. S. Snell (President) in the chair. The menu admonished the diners to "Eat, drink, and be merry, for to-morrow we—DISPENSE." Other injunctions were:

Mist. Bismuth. Co. e. Pepsin, if required.

Cap quant magnum singul, et repetat dos S.O.S.

NOTE.—The above Tariff is not subject to a discounting-clause.

In regard to Dec., Inf., Liq., Spts., etc., an experienced

compounder is in attendance, who will fill all verbal pre-

scriptions for these medicines C.O.D.

Beware of Incompatibilities.

The President announced with regret the resignation of Mr. A. J. Espley as Secretary, as he has joined his Majesty's Forces as dispenser. He was specially thanked for his services to the Association, and Mr. W. R. Cameron was appointed to the vacancy. An entertainment followed, in which Messrs. Birkett, Cameron, Dewhurst, Hindle, Hodgson, Cookroft, Greenhalgh, and Law played their parts with credit to themselves. The titbit of the evening was a recitation written and declaimed by John Law, *doyen* of the local pharmacists, on "Pills," being the soliloquy of a chemist who went a-fishing. Thanks, "Auld Lang Syne," and "God Save the King" concluded a night that will long be remembered.

Birkenhead.—A meeting of the Birkenhead and Wirral Association of Pharmacists took place at Birkenhead on January 21, Mr. C. H. Sturt in the chair. After the formal business had been transacted, a lecture was delivered by Mr. W. Harper, of Liverpool, on *Economy in Electric Lighting*. The lecture, although a little intricate, dealt with the lighting of shops and warehouses, and was greatly appreciated. Mr. Harper received a hearty vote of thanks at the finish.

Birmingham.—The annual whist-drive and supper of the Pharmaceutical Association took place in the Grosvenor Room of the Grand Hotel on January 20. The eighty members and friends who attended had an enjoyable evening, and the prizes, which had been given by members, were presented by Mrs. E. W. Mann, wife of the President. The prize-winners were: *Ladies*—(1) Mrs. Redler, (2) Mrs. Jenson, (3) Mrs. C. E. Colman, (consolation) Mrs. Akam, (mystery) Mrs. Spencer; *Gentlemen*—(1) Mr. E. R. Canning, (2) Mr. Holgreaves, (consolation) Mr. Marshall, (mystery) Mr. E. W. Mann.

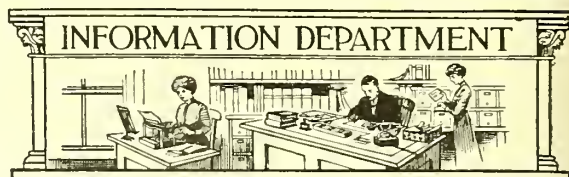
Harrogate.—A meeting of the Harrogate Pharmaceutical Association was held at the Salisbury Hotel on January 21. Mr. O. R. Windemer (President) took the chair. Thirteen other members were present and A. Mortimer (Hon. Secretary). Mr. T. E. Handford gave an address on *The New British Pharmacopœia*. It was generally agreed, he said, that the B.P. 1914 is the best that has ever been published in this or any other country. Samples of some of the new preparations were shown, and it was seen that the changes in physical characters, especially of blisters, were most marked. A discussion followed, during which the alteration in the strength of tincture of opium received

special attention. It was arranged to inform the local medical men that the new B.P. will be used on and after March 1. A Committee, consisting of Messrs. Windemer, Handford, and Mortimer, was appointed to prepare a short guide to the B.P. for the use of doctors. Mr. Crosby was elected a member. Other business of local interest was also considered.

London (N.).—Another of the series of "Fireside Socials" organised by the North London Pharmacists' Association was held on January 21 at the residence of Mr. and Mrs. A. H. Jenkin, 54 Wray Crescent, Tollington Park. There were thirty members and friends present. A paper was read by the host on *Poetry in Prose*, and a discussion followed. Refreshments were served, and afterwards a musical programme was rendered. The artists were Miss Robinson, Miss Brennan, Mrs. Bradbury, Mrs. Skinner, and Mrs. Williams, with Messrs. Jenkin, Bradbury, Tocher, Bowie, Williams, and White, the Vice-President (Mr. A. W. Bromley) acting as M.C. Thanks were accorded to the host and hostess and all those who had contributed to the very pleasant evening.

London (W.).—A meeting of the Western Pharmacists' Association was held at the Restaurant Frascati, Oxford Street, W., on Thursday evening, January 21. Mr. A. R. Melhuish presided, and made an appeal on behalf of the fund for Belgian doctors and pharmacists. He also referred sympathetically to the death of Mr. W. G. Gordelier, mentioning the fact that it was in Mr. Gordelier's pharmacy at Sittingbourne that Mr. Edmund White, President of the Pharmaceutical Society, was apprenticed. Mr. Melhuish then reported on the work of the London Pharmaceutical Committee, and answered a number of queries on Insurance work. He explained that Mr. R. R. Bennett, B.Sc., F.I.C., who was to have opened a discussion on the new B.P., was unable to be present owing to an attack of bronchitis, but they were fortunate in securing Mr. C. A. Hill, B.Sc., F.I.C., to take his place. He called on Mr. Hill to open the discussion. Mr. Hill enumerated and commented on the chief alterations in the new Pharmacopœia, which, he said, is more up to date and a better book from the pharmaceutical point of view than the previous one. He dealt particularly with the specifications and alterations in strength of liquid carbolic acid, strong solution of perchloride of iron, the dilute acids, ether, cresol, saccharated carbonate and phosphate of iron, glucose, oil of pine, senna-fruit, sweet spirit of nitre, oleostearate of zinc, and tinctures of opium and strophanthus. In regard to chemical substances, such as cream of tartar, he said these are now adequately characterised; they are simply the chemicals used by good pharmacists for a number of years, and, in his view, the new monographs afford protection against unscrupulous traders and competitors. He regretted the use of the word "mil," and enumerated the various meanings attached to that term. A long and interesting discussion ensued, taken part in by Messrs. Melhuish, Barrett, Browne, Lownsbrough, McMillan, Raithby, Procter, Pratt, Shirliffe, Atkinson, Noble, and W. L. Howie. Mr. Howie, speaking as a pharmacist who had finished his apprenticeship before the 1867 B.P. came into force, recalled the difficulties that arose then in regard to alterations in strength. He thought the pharmacist must get at what the doctor and customer want, and use his judgment. He sounded a note of warning in regard to the alterations in the requirements for nitroglycerin tablets and amyl nitrite. On the suggestion of the Chairman, the meeting concurred in the recommendation of the Council of the Pharmaceutical Society as to the sale of landanum. Mr. Hill, in replying to the discussion, referred to the question of physiological standardisation, which had been raised by the President; he considered it matter for congratulation that physiologically standardised preparations are not included, as such work is in the hands of certain firms, and the pharmacist would be precluded from making such preparations. He recalled the fact that soon after the introduction of the 1898 B.P. there was a prosecution under the Sale of Food and Drugs Acts in respect to eucalyptus oil. It is not therefore safe to assume that pharmacists will be allowed a period of latitude, and it is always safe to keep on the right side of the law. At the same time, he considered that the new B.P. reduces the possibility of vexatious prosecutions. A cordial vote of thanks to Mr. Hill concluded the proceedings.

THOMPSON'S COMPENDIUM.—John Bale, Sons & Danielsson, Ltd., 83-91 Great Titchfield Street, London, W., inform us that the fifth edition of Mr. C. J. S. Thompson's "Compendium of the Pharmacopœias and Formularies" is now in the press. The new edition will bring the work into conformity with the British Pharmacopœia, 1914. It is a useful work for dispensers as well as prescribers.



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INFORMATION WANTED.

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated. Please address us as above:

- | | |
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| 239/61. Metal - covered and canvas-covered carboys (for sending acids, disinfectants, perfumes, etc., by rail or boat); makers. | 240/30. McLaughlin's "Vigor" belts. |
| 240/32. Topham's asthma specific. | 243/15. Jacobsen, of Friedrichstad, Norway: London agents. |
| 239/53. "Hiron" (believed to be a local anesthetic). | 244/7. Moore's dog-toxin (for distemper); suppliers. |
| 240/74. "Milkwort" chilblain-cure. | 242/62. "Pyroglydine." |
| 240/740. Adam's liniment. | 244/67. "Cupeco," a concentrated soup-tablet. |
| 240/741. "Pinbron" embrocation. | 245/23. "Ival" calf-lymph. |
| 240/742. "Pixol" cough-mixture. | 234/74. Toilet-paper, "Italia" and "Terebos" brands. |
| 240/743. "Cremola Capal." | 230/25. Dr. Fichtel's herbal diuretic powders. |
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| 240/746. Prostatic massage. | 236/47. "Motor Queen" skin food: present address |
| 240/748. Syrup "Cochin Sanacho." | 245/37. Page's hair-lotion (said to be originally a Malvern preparation). |
| 240/747. "Cracko." | |

INFORMATION SUPPLIED.

Inquiries regarding the following articles have been answered. The information as to supply will be given to others who send a stamped, addressed envelope to the Information Department, THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.:

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| Andrew's camphor syrup, 233/57 | Pertussin, 241/19 |
| Antiberiberin, 240/310 | Petrosine, 230/23 |
| Bisurated magnesia, 239/28 | Phormoid, 240/31 |
| "Bivouac" cocoa, 242/64, 244/25 | Phytolacca lozenges, 241/44 |
| Cachets, 242/68 | Plaster-spreading machinery, 241/69 |
| Capsicum leaves, 242/63 | Porcelain jars (for toilet creams), 242/57 |
| Car-ma-me preparations, 244/22 | Potassium permanganate, 239/3 |
| Covered pots (actual makers), 241/64 | Pott's "Infant's Friend," 230/10 |
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| "Ernst" kidney belt, 240/71 | "Radiant" washing-powders, 240/74 |
| "Fairy" soap, 231/102 | Rodagen, 241/74 |
| Glassine labels, 240/54 | "Royal" toilet-rolls, 236/18 |
| Glass bends (for shop-rounds), makers, 233/65 | Safety-razor sharpener (U.S.A. pat. 775154), 236/46 |
| Gluten flour, 234/55 | "Sanitol" shaving-cream, 231/101 |
| Hazol, 238/59 | Sodium sulphite (S. America), 244/19 |
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| Hunt's soluble chloride of lime, 230/10 | Terry's pessaries, 234/62 |
| Hydrogen peroxide, 243/65 | Trench's remedy (for epilepsy), 240/32 |
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| "Kenercam" for dogs, 231/103 | Velvenc, 240/742 |
| Kernick's vegetable pills, 240/16 | Van Vleek's preparations, 235/140 |
| "Kitto" hair-restorer, 231/100 | Venus cream, 240/741 |
| Koronium bromide, 233/55 | Vermillionettes (American inquiry), 233/5 |
| Lavender flowers, 237/20 | "Zenobia" perfumes, 244/28 |
| Mauritius crystals, 223/17 | |
| Mollock-Armstrong ear-defender, 244/24 | |
| Mulready's liver pills, 241/26 | |
| "Nymol," 243/59 | |
| "Optimus" inhalers, 240/746 | |

CHEMIST (after kissing his fair one's hair, which is of a blonde shade that would be magnificent were it not artificial): "Thanks, my dear; on this stuffy evening my lungs had need of oxygen."

Observations and Reflections.

By Xrayser II.

The House of Commons

is so obviously the place in which our attack on the discounting clause must be made that one wonders why the fact is not officially recognised. The tentative support you give to the idea in your leader of last week will be welcomed by the trade as a distinct step forward. The year on which we have just entered will either establish or overthrow our position as State dispensers. The most optimistic of us, even those who are unjustly said by one of your contributors to have "inveigled" their less hopeful fellows on to the panel, recognise that we cannot go on indefinitely under existing conditions. The time for experiment, and, I will add, for patience, is running out, or has already run out. Hope makes a good breakfast, but a bad supper; and, though it is, as "Allan" says, difficult to kill, it cannot survive with us much longer. Conditions have, it is true, improved a little in some places. I am glad to see that in one where discounting has been particularly grievous there is not expected to be any this year; still, such local and fluctuating successes are not enough.

"O Liberty,"

said Madame Roland, as she submitted her "beautiful black head" to the guillotine, "what things are done in thy name!"—and we may add, "O Patriotism, what absurdities are proposed in thine!" The memorial to the P.A.T.A. with regard to enemy articles, and the letter of your own correspondent on the subject of "All-British" manufactures, are but two out of many instances that might be cited to show how the child survives even in the man of business. We should hurt ourselves a good deal more than our enemies by such puerile proceedings, which are only the very palest reflection possible of that policy of "frightfulness" we deprecate in them. I wonder how these patriotic souls can endure to soil their mouths with such terms as "Seidlitz powders," "Seltzer water," "Glauber's salts," "Prussic acid," "Bunsen burner," and the like. It is true that by doing so they do not materially benefit the Germans, but it is surely a kind of lip-service of which they ought to be incapable. I see that it is proposed to rename eau de Cologne eau de Louvain, and there are other well-known names, of public-houses and what not, that have been changed on the same principle; but why not go on consistently to the end and erase the trail of the Teuton from our language altogether? It might be a little inconvenient, but what of that when patriotism is at stake?

A Half-holiday for Doctors

is surely something quite novel, but after all there is no reason why the medical man should not have his recognised hours of recreation just as much as the pharmacist or the tradesman. In nine cases out of ten when the doctor is sent for it really does not matter much whether he makes his visit within one or three hours or more, and when his clients get to know that he is not available on any given afternoon they will just make up their minds to wait till he is available. As to Leven Thursday afternoon shall be sacred to the golf links so far as doctor and druggist are concerned, and only in case of the gravest possible emergency would any native be rash enough to interrupt a foursome or a medal round. *Absit omen!* The psychology of the human mind in relation to health and disease is a most fascinating study. In the majority of cases illness is chiefly a subjective condition—that is, it is psychical rather than physical. The consequence is that anything, no matter what, which arrests the attention tends to dispel the idea of illness. As an example, compare the takings on any Sunday evening when the shop is open with those of the same hours on a general holiday; the latter are usually only a fraction of the former. Similarly the doctors' half-day also shows a goodly reduction.

Syrup of Fox's Lungs,

about which a correspondent inquired last week, was, properly speaking, a lohoch—that is to say, it was of a consistency between that of a syrup and an electuary. It consisted of prepared fox-lungs, liquorice-juice, maidenhair, aniseed, sweet-fennel seeds, sugar, and coltsfoot and scabious-water. This was copied, with some trivial alterations, from Mesue, and was no doubt useful, though we need not therefore attribute any particular virtue to the fox's lungs. A few weeks since I took occasion to correct a learned annotator of Webster, who, commenting on a passage in that dramatist's "The Devil's Law-case," in which "restorative powder of the lungs of a fox" is spoken of as being good for an orator, glosses "lungs of fox" as lungwort (*Pulmonaria officinalis*). There is, of course, no warrant for this. The preparation of which Webster speaks was the dry species of the lohoch. I have several times been asked for the syrup, which ceased to be official, I believe, in 1721.

The Toxicity of Saccharin

referred to in "Netherlands Notes" is an entirely new idea to me. It is not quite clear from the paragraph whether saccharin is supposed to be toxic to animal life or only to vegetable organisms, but I take it that any substance which is really a "protoplasm-poison" is quite likely to have an injurious effect on the animal economy, especially if used in excessive quantity. Many years ago I came to the conclusion, as a result of observations made in the course of business, that saccharin was not a success as a substitute for sugar, especially in the manufacture of aerated waters. The action of saccharin when taken into the mouth is to paralyse the nerves of taste, with the result that after the first sensation of sweetness has passed no further similar sensation is felt till the nerves have recovered their normal function. The first sip of a lemonade made with saccharin is quite sweet, while the last mouthful is acid. Moreover, lemonade containing saccharin is said to have an injurious influence on the digestion, which of course is not exercised by that made from sugar. Possibly these observations may have some bearing on the Amsterdam experiments.

The Till

is the pivot on which our business turns, the centre round which it revolves; but, familiar as the thing is, the origin, both of it and of its name, is obscure. A till seems to have been originally a secret box or drawer within another larger box or cabinet, a receptacle for valuables or important documents, sometimes, but not necessarily, a part of the enclosing cabinet, which might contain many tills. The most interesting reference I know to such a till occurs in George Herbert's poem "Confession":

"Within my heart I made
Closets, and in them many a chest;
And, like a master in my trade,
In those chests boxes, in each box a till;
Yet Grief knows all, and enters when he will."

It is a long way from Herbert to Mr. Wray's shop in Little Britain, yet the latter provides us, not very long afterwards, with the first recorded instance of an undoubted shop-till, one having been stolen thence in 1698. Whether this "Til" (so it was advertised) was a box or a drawer does not appear, but *till-box* was in common use at about that time. Skeat, however, derives our word from A.S. *tyllan*, to draw aside, or [*'Angels and ministers of grace defend us!*] lead astray." He regards "drawer" as the proper sense, and connects the word with *tiller*, the handle of a rudder. Dryden has it in this form:

"Search her Cabinet, and thou shalt find
Each Tiller there with Love-Epistles lin'd."

A writer in "Notes and Queries" suggested the other week a very far-fetched derivation from the French *tillac*, a sea-term now signifying the bridge, but formerly the deck, of a ship, and surviving also, as he believes, in our *till*, a punt's locker. The Oxford Dictionary is content to say, "Origin obscure."

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Editorial Articles.

Quinine.

As we noted several months ago, the price of quinine, to the surprise of many people, has been practically unaffected by the war, and the future outlook as regards market conditions remains obscure. Statistically the position is judged to be good enough for a higher level of values, but the war has brought about abnormal and unforeseen conditions which preclude the expression of any opinion as to the future. Recently there appears

to have been a fair amount of quiet buying in the second-hand market, the value of good brands of Continental sulphate being about 1s. 2d., and there is no official German makers' quotation. The annual reports and statistical information which have been issued by the Amsterdam and London brokers (including Messrs. H. A. Van Overzee, P. Brusse, G. Briegleb, Pex & Davids, Domeier & Co., and Widenmann, Broicher & Co., Ltd.) enable us to give a short survey of the position of bark and quinine during 1914. The last-named firm in their report state that—

Markets followed a normal and, for bark-growers and quinine-makers, no doubt satisfactory course until the outbreak of war in August. The export of bark and quinine from the United Kingdom was then prohibited, and the same step was taken in Holland, which country, however, removed the embargo in September. England followed the Dutch example in November, probably in recognition of the small local consumption of quinine and the Colonies' urgent requirements; exports have since been on a fairly large scale. Germany has likewise prohibited the export of quinine and preparations, but, judging from American reports, German makers appear to be in a position to offer in the United States. The sales of quinine in the bark during 1914 were about 56,000 kilos.—less than in the preceding year, and smaller than in any year since 1906 with the exception of 1912, the year of intensive negotiations for the cinchona agreement. The German quinine-makers' requirements have probably been curtailed by partial export prohibitions, and the results of the London bark-sales revealed anything but urgent requirements on the part of the English makers. The Amsterdam sale fixed for August did not take place. The unit-price in Holland has throughout been maintained at 6.20c., pointing to the continuance of the cinchona agreement, and an unaltered first-hand price for sulphate in Germany of 1s. 1d. per oz. . . . Statistically the position remains favourable. It is true that the Java production of bark is greater than the quantity supplied to the quinine-makers under the agreement, and that that quantity is larger than the present total consumption. Bark stocks in Holland have not increased meanwhile, but no doubt there are large stocks in Java, which will not, however, affect the position unless and until circumstances arise to terminate the cinchona agreement. . . . The Java shipments have fallen off considerably, being about four million pounds less than in 1913. Ceylon exports are negligible; India has sent about 70 per cent. more bark than in 1913, stimulated no doubt by prospects of better prices. The London quinine stock has experienced a reduction of about three-quarters of a million ounces. The second-hand quinine-market, confident of an impending rise in the official price, was very steady from January to July, the spot price ranging from 1s. to 1s. 0½d. In August the price advanced to 1s. 2½d., but, business being checked by export prohibitions, great calm ensued, the value receding to 1s. 1d., and recovering but little after the removal of the embargo. At the end of the year the price was 1s. 0½d. in second-hands. Large quantities of Dutch were imported into London.

Looking further into the statistical position, we note that the exports of bark from Java to Europe are the lowest since 1906, when the official price of German quinine ranged from 7½d. to 10d. per oz.; on the other hand, imports of bark into the United Kingdom for the past six years show extremely little variation. The Amsterdam stock of bark is very large (68,500 packages) compared with previous years—e.g., in 1901 it was only 13,100 packages; 1902 to 1904, 15,000 to 17,000; 1905, 39,000; 1906 to 1911, 18,000 to 28,000; 1912, 53,000; and 1913, 70,300 packages. The range of unit at the London bark-sales was from 1½d. to 1½d. per lb., while at Amsterdam the unit was unchanged throughout at 6.20c. per half-kilo., against 4.14c. to 5.60c. in 1913. The average percentage of quinine in the manufacturing-bark offered at Amsterdam last year was 6.03, or the lowest since 1907. It is of interest to note that the London stock of quinine on December 31 was 2,702,363 oz., or about 706,000 oz. less than in 1913, and the lowest for at least the past thirteen years. Last week we referred to the fact that the Indian Government have prohibited the export of bark, but this fact will not influence the situation. Some interesting statistics regarding the imports of quinine and alkaloids into India are given in the annual review of the trade of India in 1913-14, just published.

These figures are for the official year ending March 31, and are as follows:

1912-13	1914-14
1,680,000 oz.	1,872,000 oz.
£72,000	£102,000

It will be seen that the increase in 1913-14 is 192,000 oz., or 30,000%, a respective increase of 11.4 per cent. in weight and 43.2 per cent. in value. Taking the average for the three years ended 1911-12, we find the imports were 125,000 lb., or 2,000,000 oz., the average value being 71,000l. The declared import-value in 1913-14 was 17s. 6d. per lb., or 1s. 1d. per oz., compared with 13s. 7½d. in 1912-13 and 12s. 2¾d. in 1911-12.

After Six Months.

GLYCERIN being commandeered in Germany on behalf of the War Council, it may only be dispensed by pharmacists when authorised officially!

GLYCERIN.—Business in this article is prohibited unless under permit of the War Council.

SUNDAY, January 31, completes six calendar months of the European war which Germany started by invading Belgium and Luxemburg. The aerial, naval, and military situations are somewhat outside the scope of these pages, but it may at least be said that the British experts in these departments did not at the outbreak of the war expect that we would be in so favourable a position at the end of six months as we are to-day. We have read that the most sanguine military authorities in Great Britain predicted that it would take a year to prepare an Army of a million, yet to-day it is understood that at least that number of British forces is in the field, and more than that are ready to join their compatriots in driving the enemy back to Berlin. This is all we need say on that score, but the two short paragraphs which we quote were abstracted from two German contemporaries whose reputation for accuracy is undeniable. The first paragraph is sequential to an earlier statement (*C. & D.*, January 9, p. 35) to the effect that stocks of glycerin in the pharmacies of South Germany had been commandeered on behalf of the War Council, and it was stated that this was only done in order to ascertain how much glycerin there is in the country. The more recent order appears to have convinced the War Council that there is not enough for war purposes, seeing that its use medicinally is being restricted. Imagine our War Office at Whitehall issuing such an order to every chemist and druggist in the United Kingdom! Reflection will serve better than a thousand words to bring home to our readers this phase of the economic condition in Germany. And what is ours? Let our readers turn to p. 58 of our issue of January 23, where, among four columns of produce related to the chemical and drug trades, we find thousands of packages of the raw materials from which glycerin is made. One of these items is 16,374 packages of various kinds of oils (unnamed), besides coconut oil, cod-liver oil, cotton-seed oil, fish oil, nut oil, seed oil, olive oil, palm oil, rape-seed oil, soya-bean oil, sperm oil, wood oil, and oil-seeds. These represent a week's exports, and are not exceptional; they are but one class of many kinds of raw produce essential for the industries of all the belligerents, and Germany not less than this country. They represent the raw material for certain high explosives, and at the end of six months of the war we find that we are getting all that we want, and Germany hard up. What is true of the drug-trade is true of others. We mention these facts as proving that the British Navy has done what it was designed to do—namely, to protect the overseas commerce of this island

kingdom. The protection afforded is a success. We can not only sleep in our beds o' nights without fear that a German army will land on our shores, but we have the superlative satisfaction that manufacturers and merchants in the homeland are in direct communication by sea with distant parts of the Empire, and that although delay, inconvenience, and some other disturbances of normal commercial intercourse have been experienced, these six months have proved that the credit of the Empire in fighting power is equal to the credit in finance which has made London the centre of the world in that respect.

"Unusually Large Doses."

WE print below the text of a letter which Mr. Uglow Woolcock, Secretary of the Pharmaceutical Society of Great Britain, has communicated to the medical Press:

I am instructed on behalf of the pharmacists of Great Britain to solicit your aid in calling the attention of the medical profession to the wording of a portion of the preface to the new British Pharmacopœia. In that preface the following statement is made:

It must be clearly understood that the "doses" mentioned in the Pharmacopœia are not authoritatively enjoined by the Council as binding upon prescribers. They are intended merely for general guidance, and represent, in each instance, the average range of the quantities which, in ordinary cases, are usually prescribed for adults. The medical practitioner will exercise his own judgment and act on his own responsibility in respect of the amount of any therapeutic agent he may prescribe or administer. Where, however, an unusually large dose appears to be prescribed, it is the duty of the pharmacist or dispenser to satisfy himself that the prescriber's intention has been correctly interpreted.

As a consequence a somewhat onerous obligation is cast upon pharmacists, and, although there is not the slightest reason to suspect that the members of the medical profession, speaking generally, will do anything to render the task of the pharmacist more difficult, it is felt that if the attention of practitioners were specially directed to the new condition of things they would be more prepared to co-operate in those few cases where it might be necessary for a pharmacist to refer back a prescription to the prescriber.

If it could be arranged, as a uniform practice, that where a practitioner orders an unusually large dose of any particular potent drug such dose should be initialed by the prescriber, all possibility of ambiguity would thereby be removed.

In commenting upon this the "British Medical Journal" says: "It may be doubted whether the General Medical Council has the right or power specifically to put this onerous obligation upon them [chemists], but there can be no doubt from the Secretary's letter that they are willing to comply loyally with the request of the Council. We believe that such an understanding, now formally recognised for the first time under the authority of the Pharmacopœia, will be heartily welcomed by all members of our profession, and more especially as it provides an efficient safeguard against mistake or carelessness on the part of the prescriber." We are glad that the "Journal" questions the power of the General Medical Council to enforce the B.P. preface injunction. The powers granted to the Council in respect to the British Pharmacopœia are contained in section 54 of the Medical Act, 1858, as follows:

The General Council shall cause to be published under their direction a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matter and things relating thereto as the General Council shall think fit, to be called "The British Pharmacopœia"; and the General Council shall cause to be altered, amended, and republished such Pharmacopœia as often as they shall deem it necessary.

This was confirmed by the 1862 Act (quoted in our issue of January 2, p. 49), and it is apparent from the wording of the quoted section and judgments given under the Sale of Food and Drugs Acts that the legal obligation

of chemists begins and ends with the correctness of the medicines contained in the Pharmacopœia, and that the General Medical Council has no power to dictate to chemists as to how they shall dispense prescriptions. Moral or professional responsibility is a very different thing from legal obligation. We feel sure that dispensing chemists will, as they have hitherto done, use their utmost endeavour to safeguard the interests of their customers however imperilled, even if by prescribers ordering excessive doses, but we must insist that the covers of the book called "The British Pharmacopœia" should not be regarded as containing a law by which dispensing chemists are bound; in fact, section 55 of the 1858 Act limits the interference of the Council with chemists. It is—

"Nothing in this Act contained shall extend or be construed to extend to prejudice or in any way to affect the lawful occupation, trade, or business of chemists and druggists and dentists, or the rights, privileges, or employment of duly licensed apothecaries in Ireland, so far as the same extend to selling, compounding, or dispensing medicines."

The Pharmaceutical Council's resolution did not, in our opinion, take sufficient cognisance of this provision, considering that the Society is the statutory authority in regard to selling, compounding, or dispensing of medicines. The statement in the B.P. preface should not, in our opinion, have been published without consultation with the Pharmaceutical Society, upon whose domain it is a distinct encroachment.

Pharmacopœia Revision.

Now that the new British Pharmacopœia has become familiar to pharmacists and medical men, and the significance of its international standards is appreciated, it is fitting that attention should be directed to the principles upon which the Pharmacopœias of the world are revised. This necessarily means consideration of the relations of the States to their Pharmacopœias. The new British Pharmacopœia is said to be Imperial, or rather "suitable for the whole Empire," but the General Medical Council, as its publishers, have no authority to make it so, nor are other parts of the Empire than Great Britain required by law to participate in the revision of the Pharmacopœia, while some of them have as much right to make, say, Squire's "Companion" their authority as the British Pharmacopœia. It is a peculiarity of our Pharmacopœia that it shares with the Italian and Japanese the obloquy of being non-pharmaceutical in the sense that pharmacists are not by law made responsible for those matters in the Pharmacopœia revision which are peculiarly their province. Before another edition is prepared some change in this respect will be looked for, since it is considered that the Committee of Reference in Pharmacy has ceased to exist, and there is now available for Government consideration the draft Bill put forward by Mr. John C. Umney for creating a central British Imperial Pharmacopœia authority, representative of the whole Empire and of all interests involved—Governmental, legal, medical, pharmaceutical, and scientific. This representative character is a fundamental principle in practically all Pharmacopœia Commissions, particularly Governmental participation. It is desirable to consider the Pharmacopœia arrangements in countries which share with ourselves in the international agreement as to potent remedies.

In every Continental country the Pharmacopœia is issued under Government supervision. In the majority of cases this task falls within the scope of the State Board of Health, which in its turn depends upon the

Ministry of the Interior, or of Justice as in Norway and in Denmark. In France the Committee is formed with the approval of the Minister of Public Instruction; in Germany it forms part of the Imperial Board of Health. The members of the Committee are usually chosen from among the members of the Board of Health, supplemented in some cases by outside assistance. With the exception of Germany and Switzerland the Committee is generally composed of relatively only a few members: France, sixteen; Austria, six; Hungary, four; Croatia, five; Belgium, nine; Holland, ten; Denmark, eight; Sweden, eight; Norway, six; and Russia six to eight. In Germany the Pharmacopœia is elaborated by the joint work of two sections—the medical section, which includes the health officers of the different States and members of the Imperial Board of Health; and the pharmaceutical section, which consists of three professors of pharmaceutical chemistry, one professor of botany and one of pharmacognosy, two manufacturers appointed to represent the interests of chemical industry, two chemists, and five pharmacists in business. The Committee which elaborated the last Swiss Pharmacopœia consisted of two sections also—the medical section, with nineteen members, and the pharmaceutical section, with thirty members. The composition of these Commissions does not vary to any great extent. They include, in the first place, a certain number of University professors who represent the medical, chemical, botanical, pharmacognostic, and pharmacological interests, while pharmacy is represented by one or more professors of pharmaceutical chemistry and by at least two pharmacists. The Commission often includes a veterinary surgeon (France and Roumania), or in some cases outside assistance is made use of by permitting the presence of an expert on some point at a general meeting of the Committee. We now come to one important point, and that is the degree of participation in the work conceded to pharmacists in business.

The preface to the new edition of the British Pharmacopœia, following precedent, especially an acknowledgment to representative pharmacy in the preface to the 1898 edition, contains the following statement:

The Council, recognising that it was desirable to obtain the co-operation of medical, pharmaceutical, chemical, and botanical authorities throughout the Empire, has taken effective steps to this end in preparing the present Pharmacopœia, which has been in course of preparation for several years. Thus it has instituted:

(1) A Pharmacopœia Conference, consisting of members of the Council and the following delegates nominated by the Pharmaceutical Societies of the United Kingdom. [Here names are given.]

(2) A Committee of Reference in Pharmacy, consisting of the following members nominated by the Pharmaceutical Society of Great Britain and the Pharmaceutical Society of Ireland. [Here names are given.]

(3) A Committee of Reference in Chemistry, consisting of Sir T. E. Thorpe, F.R.S., and Dr. J. J. Dobbie, F.R.S.; and a Committee of Reference in Botany, consisting of Sir David Prain, F.R.S., and Mr. E. Morell Holmes.

(4) A series of official inquiries transmitted by the courtesy of the Colonial Office and of the India Office to all the Governments and Administrations of the Empire, asking for the co-operation of their respective medical and pharmaceutical authorities in the work of adapting the new Pharmacopœia to the requirements of all parts of the British Dominions.

Reference is also made to certain researches, criticisms, reports, and recommendations. Such acknowledgment is gratuitous on the part of the General Medical Council, just as the pharmaceutical assistance has been. In France, Austria, Croatia, Spain, Sweden, Denmark, Holland, Belgium, Switzerland, and Germany, the Government Departments or the Commissions issue a public invitation

to all pharmaceutical and medical associations, in some cases to every individual pharmacist, asking for suggestions, before undertaking the revision of the Pharmacopœia. It may be admitted that the General Medical Council is in one sense a Government Department, and that its invitation to pharmacists resembles that given in the countries named. It may look so on paper, but in practice we know that in the production of the British Pharmacopœia the final decision in regard to any datum or standard is given by a medical practitioner or practitioners. The decisions of the Committee of Reference in Pharmacy have all been subject to this extraordinary practice, without conference or appeal. In this respect the principle is fundamentally different from the practice of the countries with which we have been associated in the international agreements, and much less dignified and thorough than what would be possible under Mr. Umney's proposal. This would secure the presence of eight pharmacists on the Pharmacopœia Commission, including one professor of pharmacutics and two Colonial pharmacists. At the same time, criticism of the monographs to be included would be invited, thus securing the co-operation of all interested in the work before its publication, while the Pharmacopœia would be subject to constant revision, so that the work would be continuous, and thus the best possible results be attained. These provisions embody to a great extent the *modus operandi* adopted in many Continental countries, in which the widest participation is invited, while the existence of a standing Pharmacopœia Commission, or of a Government office entrusted with the task of following pharmaceutical progress at home and abroad, would ensure continuity of the work to be done in revising and keeping this standard up to date. Is this reform to be proceeded with?

Mercury.

HERE is some difficulty in forming an idea as to the immediate outlook in the mercury-market after the recent further advance of last week, when up to 11*l.* 15*s.* per bottle was apparently paid for a few lots of Spanish. The erratic state of the market may be gathered from the fact that, directly after this advance was reported, it was claimed in a certain quarter that there had been previously a seller at about 11*l.* 10*s.* per bottle, and even as, but that he could not do the business although the importing firm insisted they were not sellers. The quotations now range from 11*l.* 10*s.* to 11*l.* 12*s.* 6*d.*, but they are quite nominal in the absence of new business. The price is already very high, but the quantities available on this side are limited owing to the light imports, and it is whispered that another considerable rise is quite possible. The profits now made by producers at current prices should certainly stimulate the output where this is possible, but it does not necessarily follow that any very large increase of the world's output will be realised when given a maintenance of high prices. Meanwhile the new set-back in the American output for the past year is worth noting. According to the preliminary figures collected from individual producers, the output in 1914 amounted to 16,568 bottles of 75 lb. each, valued at an average domestic price for 1914 at San Francisco (out \$49 per bottle) at \$811,832. These figures compare with 20,213 bottles, valued at \$813,171, for 1913. Last year's output thus shows a further decrease of 3,645 bottles, and is the smallest recorded since 1908. Last year there thirty-three mines and prospects producing

quicksilver, of which twenty-three were in California, against twenty-four and eighteen respectively in 1913 and 1912, which tends to show that the deposits exploited are steadily deteriorating in value. Exports of quicksilver from the United States for 1914 were, according to the records of the Department of Commerce, estimated at 33,900 lb., or 452 bottles, valued at \$21,350, against 1,140 bottles, valued at \$43,574, during 1913. The imports for consumption amounted to 9,140 bottles (685,604 lb.), valued at \$300,000, against 171,653 lb., valued at \$75,361, in 1913. The largest imports of the year were made prior to the war, and preliminary figures indicate steadily declining imports in the second half of the year. It has been generally understood that the nations at war have not permitted exportations of metals, yet it has been reported that two consignments of about 1,000 bottles each have been received at New York from Italy since hostilities commenced. Such importations naturally tend to lower American producers' profits, and may prevent them from taking full advantage of the rise in price they have been counting upon to offset long periods of low prices and depression. The following figures show the extreme prices touched in London during the last ten years, with imports and exports into the United Kingdom:

		Highest.		Lowest.		Imports.	Re-exports.
		£ s. d.		£ s. d.		Bottles.	Bottles.
1905	...	7 15 0		7 1 0		34,034	21,330
1906	...	7 7 6		6 17 0		38,823	27,712
1907	...	8 5 0		6 15 0		39,448	29,465
1908	...	8 10 0		7 12 6		43,605	22,348
1909	...	9 17 6		7 19 0		43,163	22,050
1910	...	9 15 0		7 9 0		44,595	24,748
1911	...	10 0 0		7 10 0		46,547	31,438
1912	...	8 12 6		7 3 6		47,261	32,240
1913	...	7 15 0		7 0 0		45,348	26,815
1914	...	11 5 0		6 10 0		37,568	22,975

Synthetic Medicinal Chemicals.

THE "British Medical Journal" urges medical men to replace the German names of synthetic medicinal chemicals by non-proprietary names. It is added that there is no valid reason for the use of a large proportion of the synthetic drugs which appear on the market in such numbers. The problem at present to be solved is thus stated:

The present task for British scientific chemists and manufacturers is to produce an adequate supply of those synthetic drugs which are needed and to introduce new ones as and when their value and usefulness may be proved, but to avoid deluging the medical profession with a host of substances possessing no advantage over others already in use, in this latter respect learning from the Germans "how not to do it."

Scarcity of Doctors in Germany.

"EYE-WITNESS," who writes so engagingly of the things that are happening on the Western war frontier, gave some particulars about the incapacity of certain German doctors who essayed to operate on some wounded Germans. These medical men were ignorant even of the proper use of the various surgical instruments, and "Eye-witness" tells us that the British surgeons humanely prevented them from further practice on wounded Germans. The incident, however, is worthy of note, as it is doubtless due to the steps that were taken in Germany to increase quickly at the outbreak of the war the number of medical men. It appears from a note sent by the Imperial Chancellor to the German Medical Society that licences to practise were granted to 2,250 medical students who had not fulfilled the curriculum ordinarily required. About 1,500 of these are acting as medical men in the German army and navy, and 750 are employed in hospitals and sick-club work. The number of German physicians was

in this way increased by 7 per cent. It appears also that the medical practitioners are apprehensive that when these half-qualified men return to civil life there will not be enough practice for all, and, moreover, it opens the way to the introduction of free choice of doctor to members of sick-clubs, a thing that the doctors in Germany have a horror of.

The Schedule of Poisons.

THIS is the title of an article in "The Lancet" of January 23, p. 192. It is based upon the Pharmaceutical Council's resolution regarding the sale of laudanum consequent upon the British Pharmacopœia's alteration of the strength of that preparation (see *C. & D.*, January 9, p. 43). Our contemporary remarks:

It would be interesting to know how often we are likely to meet with a member of the public who has any notion of the difference. Probably the majority will ask for what they have been in the habit of using, and if tinctures of both strengths are kept, the one will be reserved for the emissary from the local inspector, the other, with a few words of explanation, will be supplied to the public as before. There is always danger in keeping preparations of different strengths with similar names, and it is to be hoped that this suggested system of meeting the demand for the sale of a remedy which may become a poison if improperly employed will speedily be rescinded.

These remarks show a peculiar disregard of facts. No druggist in the kingdom can alter the fact that laudanum is a household remedy, and has hitherto been a preparation containing 25 per cent. less morphine than the laudanum of the B.P. 1914; and surely if retail chemists were to regard the change as a thing not worth mentioning to customers, "The Lancet" would be the first in the public interest to deprecate this and to point out the danger. Our contemporary proceeds to remark upon the fact that the Poisons Schedule in Ireland still includes all preparations of opium in Part II., and concludes: "Comparison of the schedules of Great Britain with those of Ireland reveals several other inconsistencies and affords strong reasons for suggesting that the two should be brought into harmony whenever it is possible to devote attention to the subject." We may point out that the Poisons Schedule of Great Britain was altered by the Act of 1908, and that the Royal College of Physicians in Ireland is responsible for additions to the Schedule in Ireland, but it cannot alter any item in the Schedule which was placed there by Parliament.

The Aniline-dye Industry.

PROFESSOR W. M. GARDNER, of Bradford, contributes to "Nature" a summary of the present position regarding the establishment of a large aniline-dye industry in this country. He points out that at least 1,500,000 workers are engaged in the various branches of the textile trade, which has an annual value of 200,000,000/. Nearly the whole of this vast industry depends for its commercial success upon the use of dye-stuffs, which cost about 2,000,000/. per annum, and only about 10 per cent. of the necessary quantity of dye-stuff is made in this country (we have shown that 20 per cent. is the figure). The effect of the war in cutting off Continental supplies is then mentioned, and details are given of the appointment of a Committee charged with the duty of elaborating a scheme for the formation of a manufacturing company. The Government promised generous assistance in any scheme which is acceptable to the principal users of dyes. The scheme put forward so far requires modification, but from it can be elaborated a national and co-operative effort which is bound to succeed. Even to discuss the question of the breakdown of the proposal to make ourselves independent of German products is almost a triumph for

the enemies of our country and a national humiliation for us. If as a starting-point of deliberations the view is taken that the thing must be done, the details will fall into their proper perspective. Professor Gardner, however, urges very strongly the need of a full recognition of science. The selection of a board of directors entirely from financiers is, the professor states, a mistake. There must be adequate representation of the technical expert on the directorate. A voluminous correspondence has been going on in the daily Press, and much of it is devoted to the political aspect of the scheme, with which we have no concern. We commend Professor Gardner's summary of the case as worthy of consideration by all who are at present hindering the establishment of a national dye-industry in this country.

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

B. E. A. Peppermint Oil.—A note is given in the "Perfumery Record" (January 22, 1915) on a sample of peppermint oil distilled from Mitcham plants grown at Molo, in the highlands of British East Africa, about sixteen miles south of the Equator. The oil is stated to possess a most excellent aroma, and to be quite free from bitterness, with a very high menthol figure. The following constants are given: Sp. gr., 0.967; opt. rot., $-63^{\circ} 30'$; total alcohols as menthol, 67.5 per cent. The solubility in 70-per-cent. alcohol is one in three volumes, becoming cloudy with ten volumes. Our contemporary is of opinion that this source of supply should be an important one in the future.

Oils of the Coniferae.—In a further contribution to the chemistry of the coniferous oils, Schorgen ("Jour. Ind. Eng. Chem.," 1914, 6, 893) gives the following characters: The leaves and twigs of *Pinus ponderosa*, the Western yellow pine, yield from 0.04 to 0.126 per cent. of essential oil, sp. gr. 0.872 to 0.885, refractive index at 15° 1.4793 to 1.4838, optical rotation -15.7° to -19.6° , acid-value 0.67 to 2.36, ester-value 3.9 to 8.1. The cones yield a small amount of oil, sp. gr. 0.876, refractive index 1.4789, optical rotation -11.5° , acid-value 1.27, and ester-value 7.2. The leaves and twigs of *Pinus Lambertiana* gave from 0.12 to 0.45 per cent. of oil, sp. gr. 0.8676 to 0.874, refractive index 1.4777 to 1.4795, optical rotation -11° to -16.5° , acid-value 0.68 to 2.38, and ester-value 2.22 to 5.91. The cones of this tree yielded 0.3 per cent. of oil, sp. gr. 0.8692, refractive index, 1.4771, optical rotation -23.2° , acid-value 0.63, and ester-value 3.75. The approximate composition of the various oils is as follows:

	Oil of <i>P. ponderosa</i> .		Oil of <i>P. Lambertiana</i> .	
	Leaves	Cones	Leaves	Cones
Furfuraldehyde	—	trace	trace	trace
<i>l.a.</i> Pinene	2 %	6 %	21 %	22 %
<i>l.c.</i> Camphene	—	—	—	21
<i>l.e.</i> Pinene	75	60	51	40
Dipentene	6	12	12	5
Bornylacetate	2	2.5	1.5	1.5
<i>l.</i> Bornicol	7	4	8	3.5
"Green oil"	3	4	1	—
Sesquiterpene	—	—	—	1

The Solubility of Santal Oil in Alcohol.—The "Perfumery Record" (January 22, 1915) gives a translation of an article contributed to the "Pharmaceutisch Weekblad" on this subject. The authors find that the statement of Schimmel & Co. ("Report," October 1906, p. 89), that the solubility of santal oil in 70-per-cent. alcohol, as stated in the fourth edition of the Dutch Pharmacopœia (1 in 5), does not apply for a temperature of 15° , but for one of 20° , agrees with the results of their experiments on various samples of sandalwood oil of undoubted origin. When determining the necessary alteration in the solubility figures of the Dutch Pharmacopœia, they were struck by the difficulty of fixing a series of coefficients of solubility when it is desired to adhere strictly to a temperature of 15° , and also by the difficulty of actually measuring a determined quantity of oil. They are of opinion that it would be more sensible not to determine the solubility of an oil in a given quantity of spirit, but to determine at what temperature the solution of the oil in a given quantity of spirit becomes turbid—the dissociation temperature. As a result of a large number of experiments with genuine oils and with oils containing small proportions of other oils, they conclude that 1 part by weight of the oil in 4 parts by weight of 70-per-cent. alcohol must be clear at 24° , and that a small deviation from this must be accepted as showing admixture with a foreign oil.



A Turkish Drug-sellers' Shop.

SOME time ago we mentioned the addition to the Wellcome Historical Medical Museum of a complete Turkish medicine-vendor's shop. We are now able to give a photograph of this very interesting addition to the Wigmore Street Museum. Probably in no part of Europe is the art of pharmacy practised in a more primitive and picturesque manner than in the old drug-bazaar in Constantinople. The appearance of these quaint drug-stalls, with their bundles of herbs, roots, skins of animals, ostrich-eggs, sun-fish, charms, and quaint signs, takes one back to the Middle Ages. Here may still be purchased the famous treacle for which Constantinople has been famous for centuries, Sealed Earth from the sacred Isle of Lemnos revered by the ancient Greeks, mummy-powder, crabs'-eyes, and dried lizards.

The shop depicted is known as "The Sign of the Lamp," and bears a striking resemblance to the apothecaries' shops of Western countries in the seventeenth century. This time last year this interesting mediæval pharmacy was actually in working at Constantinople, and the conductors of the Museum are to be congratulated on the enterprise displayed in transferring it to London. Some chemists are not aware of the rich collection of pharmaceutical relics to be found in the Wellcome Historical Medical Museum, although others have already visited the Museum several times. The pharmaceutical section is situated in the basement, and covers a large space. It may safely be asserted that the Continental pharmaceutical exhibitions have been completely out-distanced by the Wellcome Historical Medical Museum.

Corner for Students.

Conducted by Leonard Dobbin, Ph.D.

Communications should be addressed Corner for Students, "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Report on January Exercises in Practical Chemistry.

THE exercises in practical chemistry printed in our issue of December 26 were intended to be of a specially simple character. The necessary materials were all common substances, the various solutions were very easily prepared, and the quantitative work was capable of being carried out with sufficient exactness by the aid of a balance of only a moderately accurate description. In designing the exercises the fact was kept in view that during the vacation many students might not have ready access to a fully equipped chemical laboratory, and the requirements were accordingly restricted to the simplest materials and apparatus. The response from students has been disappointing, and apparently many former correspondents have been altogether deterred from attempting the exercises, presumably on account of their being different from those usually set, since it could not be in consequence of their being more difficult than these. At any rate, whatever the cause may be, only four reports were sent in. From these reports, as from those sent in on former occasions when exercises of a somewhat similar character were set, it is apparent that in the preparation of the various solutions and in their subsequent employment for the prescribed exercises, careful attention was paid to the directions given, and that the results of the qualitative experiments were, on the whole, observed and described with very satisfactory accuracy. The solubility-determinations were, for the most part, less accurate, while the least satisfactory part of the reports was in each case found in the statement of views as to the bearing of both the qualitative and the quantitative experiments on analytical work.

The most important points in connection with the analytical bearings of the exercises were:

1. That a white precipitate produced by adding calcium chloride to a neutral solution containing salts of the alkali-metals only is not necessarily the calcium salt of an organic acid, but may consist, for example, of calcium sulphate.
2. That the absence of organic matter from such a precipitate may be proved by gently igniting the latter and adding hydrochloric acid to the residue. Charring or ignition and evolution of carbon dioxide on the addition of hydrochloric acid after the ignition do not both occur in the case of inorganic calcium salts, such as calcium sulphate, calcium phosphate, etc., whereas both indications are conspicuous in the case of most organic calcium salts. It is particularly to be kept in mind in this connection, however, that a precipitate of calcium oxalate is not conspicuously charred on ignition, and also that a precipitate which originally consists of calcium carbonate is not sensibly decomposed by gentle ignition and still yields carbon dioxide on the addition of hydrochloric acid.
3. That a solution of calcium sulphate does not produce any precipitate in solutions of alkali-metal sulphates, and consequently that this reagent may be employed as a test for tartrates in presence of these sulphates. Incidentally, Exercise I. explains the employment of calcium sulphate as a reagent in testing for strontium in the examination of the acetic-acid solution of a precipitate of barium-group carbonates.
4. That, since the saturated solution of calcium sulphate contains only a very small quantity of the dissolved substance, care must be taken to add this reagent in considerable volume, in order that the precipitate of any insoluble salt which may be formed shall be sufficient in quantity to permit of the application to it of further tests.
5. That in testing for a tartrate by means of a calcium-salt solution (whether chloride or sulphate) a considerable time must be allowed for the formation of the precipitate.

In Experiment I., tube 3, the quantity of calcium chloride added was many times that required to precipitate the whole of the tartaric-acid radical present, while in tube 4 the quantity of calcium sulphate added was only sufficient to precipitate somewhat less than one-half of the tartaric-acid radical. These facts explain why there was a much greater quantity of precipitate in

tube 3 than in tube 4; but although the facts themselves were reported none of the writers of reports made reference to any possible explanation.

PRIZES.

The First Prize for the best report sent in by an unqualified student has been awarded to

WM. RAMAGE, 23 High Street, Ryde, I.W.

Subject to the stipulation that the competitor is unqualified, the Second Prize has been awarded to

ANNIE R. BENZIE, 28 Esslemont Avenue, Aberdeen.

First Prize.—Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Second Prize.—Any scientific book which is sold for about five shillings may be taken as a second prize.

The students to whom prizes are awarded are requested to write at once to the Publisher naming the book or books they select.

MARKS AWARDED FOR REPORTS.

Wm. Ramage (1st prize)	73	Dens	...	...	42
Annie R. Benzie (2nd prize)	...	Fraises (qualified)	...	...	95
...	56	...	...	...	...

TO CORRESPONDENTS.

WM. RAMAGE.—Your experiments and measurements were evidently carefully made, and they are sufficiently reported; but we commend to your notice the various points referred to in the general remarks above on the bearings of the experiments on qualitative analysis, as you were not quite successful in regard to the latter. The solubility of the calcium sulphate came out rather high.

ANNIE R. BENZIE.—As you will see from the general remarks, the exercises were based on the differences of calcium chloride and calcium sulphate in regard to their use as tests for tartrates, and not on the respective values of a tartrate and of a sulphate as tests for calcium. Your calcium-sulphate solubility result was approximately double what it ought to have been, and this seems to point to the saturated solution not having been filtered perfectly free from suspended calcium sulphate. In stating the solubility you incorrectly gave the result obtained by calculating grams of calcium sulphate per 100 grams of solution, instead of grams per 100 grams of solvent.

DENS.—Your observations were not all accurately made and sufficiently reported, and the result of your solubility-determination was distinctly low. Probably the solution of calcium sulphate was not quite saturated. Make a study of the general remarks, and note the point mentioned in the last sentence of the reply immediately preceding.

FRAISES.—A very good report. Note that in testing for a tartrate by means of calcium chloride or sulphate it is assumed that the oxalic-acid radical has already been proved absent, or has been removed if found present.

College Note.

WESTMINSTER COLLEGE OF PHARMACY.—The following students obtained awards at the recent College examinations: *Chemistry: Silver Medal*—W. R. Gardiner; *Certificates*—L. W. Merrick, R. J. Pitchforth, W. W. Harrison, J. Wolk, J. Somerville, R. M. Wardle, — Sumption, A. E. Marsh, T. Haigh, J. A. Deacon, W. Cookson, R. Charlesworth, H. W. Vickers, A. Ll. Babbage, J. P. Wellington, H. R. Clarke, T. Hale, O. C. Geenty, and — Howitt. *Pharmacy: Silver Medal*—A. Ll. Babbage; *Certificates*—L. W. Merrick, R. J. Pitchforth, J. Somerville, R. M. Wardle, T. Haigh, H. W. Vickers, W. E. Wray, C. Corrin, and — Howitt. *Botany: Silver Medal*—T. Haigh. *Certificates*—W. Folkard, L. W. Merrick, R. J. Pitchforth, W. W. Harrison, E. S. Edrich, J. Wolk, J. Somerville, W. R. Gardiner, R. Charlesworth, H. W. Vickers, C. Corrin, — Newell, H. R. Clarke, T. Hall, — Howitt, and O. C. Geenty. *Materia Medica: Silver Medal*—H. W. Vickers; *Certificates*—W. Folkard, L. W. Merrick, R. J. Pitchforth, J. Somerville, W. R. Gardiner, — Howitt, T. Haigh, R. Charlesworth, A. Ll. Babbage, C. Corrin, and O. C. Geenty. *Dispensing: Silver Medal*—A. Wilson, and College certificates to 21 students.

BLEACHED FLOUR.—"The Lancet" has had an inquiry which shows (1915, I., 37) that the practice of bleaching wheaten flour is persisted in, and that apparently it is countenanced in spite of official reports and the prohibitory legislation in force in other countries.

Papain: Its Production and Commerce.

In this article the history, botany, cultivation, and commerce of Papain are described. The photographs were expressly taken for THE CHEMIST AND DRUGGIST by Mr. H. F. MacMillan, Curator of the Peradeniya Botanic Gardens, Ceylon.

BOTANY.

PAPAW (*Carica Papaya*) is a familiar tree in many parts of the tropics, being commonly grown in gardens and around native houses, or occasionally cultivated in small areas near towns for supplying the fruit to local markets. Much has been written regarding the well-known fermentative properties of the tree and its capacity for rendering tough meat tender; many and wonderful have been the stories related concerning it.

The tree is a native of tropical America and the West Indies, and was introduced into Ceylon probably early in the seventeenth century, as it is recorded to have been found in the island when the Portuguese were in possession. The papaw-tree belongs to the natural order *Passifloraceae*; it is small and erect, herbaceous and normally branchless. It bears at the top a crown of large, coarse, palmate leaves, at the base of which are produced short-stalked flowers, which are regular, fleshy, and creamy-white. Usually these are unisexual and the tree is generally monœcious, but frequently trees are met with bearing bisexual or both male and female flowers, and these give rise to fruits; thus "male" trees not

trees from seed of a monœcious parent varies considerably, but usually the former predominate. Numerous



MOUNTAIN PAPAW.
GROWING 5,000 FT.
ABOVE THE SEA.



PAPAW (*Carica Papaya*).



A PAPAW PLANTATION.

infrequently bear fruit, which apparently differ only from that of a female tree by being smaller and perhaps less palatable. The proportion of pistillate and staminate

species of *Carica* have been recorded and described. The "Index Kewensis" enumerates some twenty-four species. Very few of these, however, are well known, the most familiar being the large tropical papaw (*C. Papaya*), the subject of this article, and the smaller mountain papaw (*C. candamarcensis*). The latter is a native of Ecuador, and is suited only to the higher elevations in the tropics where sub-tropical conditions obtain. This species was first introduced in the Hill Garden at Hakgala, in Ceylon, in 1880, and has now become thoroughly acclimatised and in places semi-naturalised. The habitat and character of the tree are similar to those of *C. Papaya*, but the fruit is much smaller, pear-shaped and ridged, and the tree produces side branches and suckers from the base. The fruit is characterised by an acid flavour, but is good when stewed with sugar. It contains but little latex or papain, and the latter is not collected in Ceylon. The papaw (*C. Papaya*), owing to its natural adaptation to cross-fertilisation, occurs in numerous forms or sub-varieties, these varying chiefly in the shape and size of fruit. Some contain a large quantity of seeds, others are seedless. The flavour of the fruit varies to some extent in different varieties, as also does the proportion of papain, or milky juice, present. Fanciful names are sometimes given by plant-dealers to different varieties, but such names are usually misleading.

THE FRUIT.

The large, green, fleshy, and gourd-like fruit varies in shape, and also somewhat in flavour, in different

varieties; in some it is almost round, in others oblong or oval, the latter the most common form, being usually about 7 to 9 inches long by about 4 to 6 inches in diameter. The fruit may weigh from about 3 lb. to as



COLLECTING THE MILKY JUICE BY SCARIFICATION.

much as 7 lb. or more. The flesh or edible pulp varies in thickness from about 1 to $1\frac{1}{2}$ in., and in colour from a light pink to a light orange tint. It is of a soft, melting consistency, refreshing and agreeable to the taste, especially on first acquaintance with it. It is commonly used as a table-fruit in hot countries, and is comparable to a sweet lemon, hence it is sometimes called the "tree-melon." In an unripe state it is boiled and used as a vegetable, or cut into cubes and pickled. Those fruits having the least number of seeds are usually the best flavoured. In common with the leaves, which are used for wrapping round fresh meat in order to render it tender, the fruit contains a powerful ferment, and cooks frequently take advantage of this property and make use of it in cooking, either by rubbing the juice on the meat or by placing a piece in the water in which the latter is boiled. A tree will produce fifty to seventy fruits or more a year during the first few years of its life. The fruit is commonly retailed in the markets at the equivalent of 3d. to 5d. each, and is supplied in rather large numbers to the hotels in Colombo and the shipping in the harbour. It has the disadvantage of being easily damaged, and has consequently to be handled very carefully. The centre of the fruit consists of a large hollow cavity, with the seeds (if any) attached to the walls along the placenta. The seeds are usually very numerous, but sometimes few or none; they are of the size of small peas, olive-coloured, with a soft and slimy surface. Their flavour is rather pungent, resembling watercress, and is relished by some

persons in salads. About 3,500 seeds, when fresh, go to a pound, and about 4,500 when moderately dry. Fresh seeds take from ten to fifteen days, or longer, to germinate, according to age; old and much-dried seeds take from one to two months longer.

CULTIVATION.

Papaw-seeds, if sown fresh, should, as has already been said, germinate in a fortnight or a few weeks, according to age, the older seed taking longest. The seedlings grow rapidly, and the trees may be planted out at about 10 by 8 ft. apart, allowing, say, 540 to the acre. They commence to bear fruit when about a year old from seed, and continue fruitful, without intermission, until they become too old or exhausted. At the age of about five years, when it should have produced at least 150 fruits, or an average of thirty a year, the tree becomes too unproductive for profitable cultivation. The papaw-tree is suited to a hot and humid climate, thriving from sea-level to about 3,000 ft. elevation. It affects a rich loamy soil, and does not withstand drought (unless well irrigated) or a dry gravelly soil. The United States Department of Agriculture has been making experiments recently in grafting "female" scions on "male" stocks, with a view to establishing any variety of the former showing special qualities, and also eliminating male trees.

PAPAIN.

In recent years the papaw has come into prominence on account of the drug papain obtained from the fruit. The usual manner of collecting this is by making light superficial incisions or scratches in the unripe fruit while on the trees, using a bone or ivory knife for the purpose; the milky viscid juice immediately exudes from the cuts and is collected in porcelain enamelled or glass dishes; it coagulates naturally, forming a resinous-looking granular mass, and is then dried in the sun. It must be dried rapidly, otherwise it putrefies and gives off a very unpleasant sour odour. To obviate this a trace of formalin should be added to the juice when collected. The process of obtaining the juice by incision may be repeated at intervals of one or two days.

In Ceylon, where the collection and preparation is entirely in the hands of the peasants, the drying is invariably effected by laying the coagulated milky juice on plates or enamelled dishes in the sun. When dry it



AN INTERESTING PHOTOGRAPH.

This shows: (1) The centre, a female or pistillate tree. (2) On the right, a monoecious tree; and (3) on the left, a male or staminate tree.

is packed in bottles or jars for export. No agent is used in Ceylon for hastening coagulation, which rapidly takes place on exposure of the juice to the air. The average yield of papain per tree does not, in Ceylon, appear to

have been definitely worked out, but from trials made it has been found that a dozen average-sized fruits should yield about $\frac{1}{2}$ lb. of the dried granulated matter at one tapping. In native villages, where papain is chiefly collected, the preparation is neither carefully made nor clean, and, like many other preparations, it is liable to be adulterated, arrowroot starch, rice, congee, or flour being found a suitable medium for this purpose. There seems no evidence, however, that, as is sometimes supposed, the milky juice of other plants is used as an adulterant in Ceylon, even in remote villages, where the collection of papain is chiefly carried on.

Mr. H. Kelway Bamber, F.I.C., F.C.S., Government chemist, Ceylon, has found that papain can be purified by straining the juice through fine muslin and adding three times its volume of alcohol, the pure papain being then precipitated. It is next collected on filter-paper, and the product dried, the yield being about 2.50 per cent. The process, however, is too expensive and troublesome to make the result remunerative, and it is considered that the purifying process adopted in the countries of importation is less costly, though equally satisfactory.

PAPAW IN THE PACIFIC.

The papaw-tree also grows largely in the Hawaiian Islands, and from a pamphlet which has recently been



PAPAW-TREES INTERCROPPED WITH GOURDS.

issued by the Hawaii Agricultural Experiment Station, it appears that the manufacture of papain is beginning to receive attention in those islands. The method of preparation is explained at some length. There are no difficulties, it is stated, requiring great skill in collecting and preparing the juice for market, but care is necessary.

Usually only the fruits are tapped. These abound in juice, particularly when the tree is young and during warm weather after rain. In the early morning the flow is abundant. Very shallow incisions, not over one-eighth of an inch, are made about half-an-inch apart, lengthwise, of the nearly mature green fruits. The tapping may be repeated at intervals of three or four days. A bone or very blade may be used. The flow is free at first, and the liquid is caught in porcelain glass or earthenware vessels. Coagulation soon begins, and the mass must be scraped from the surface of the fruit. In most places where the industry is conducted, labour is cheap, but it would seem that a more convenient and efficient vessel could be devised which could be quickly put in place to receive the juice, permitting the operator to proceed to the next tree. The juice must be dried promptly after it is collected or decomposition begins. As the juice flows freely in the early morning it is usually collected then, and dried wholly or in part during the remainder of the day. Sun-drying is followed to some extent, but artificial means, such as are furnished by fruit-drier, are preferred. In Montserrat several driers have been made for the purpose and operated by the companies buying the juice from the peasants, who gather it. One form of drier is 3 ft. by 3 ft. and 6 ft. in length. The sides and ends are of brick, with an opening at one end for the flue and at the other end to admit fuel; the top is open. About a foot below the top a sheet of iron is placed, and upon this an inch or two of sand to modify and

distribute the heat arising from the fire beneath. The coagulated juice is spread upon brown linen stretched upon frames, which are made to fit the top of the drier. The drying must be effected with low temperatures, as great heat destroys the ferment. A temperature below 100° F. is preferred by some operators. The coagulated material may be placed upon sheets of glass while drying. When dry and flaky it may be ground in a coffee-mill, and should then be in the form of a white or cream-coloured powder, which should be placed in bottles and tightly closed.

PROPERTIES OF PAPAIN.

The peptonising or digestive power is well known, and it is considered a good substitute for animal pepsin, but, unlike the latter, it requires neither the aid of an acid nor an alkali to convert the contents of the stomach into a peptone. The celebrated chemist Vauquelin compared papain to "blood deprived of its colouring-matter." The material has not, however, come into extensive use in medicine, its consumption at present being chiefly confined to America, where it is much used in the treatment of chronic dyspepsia, gastritis, diphtheria, etc., and it is also recommended for eczema. In Ceylon it is not used medicinally. It is described, however, in Waring's "Indian Pharmacopœia" and Dymock's "Materia Medica of Western India." Papain has the effect of curdling milk, like rennet, and might be used as a substitute for the latter. The demand for papain is, of course, limited, and the present supply appears to come almost entirely from Ceylon and Jamaica.

COMMERCE.

The export of papain from Ceylon is in the hands of a few firms who buy from the villagers in the interior, mostly in the districts of Kurunegalle and Kegalle, and pay about Rs.6 (8s.) per lb. to Rs.8 (10s. 6d.) per lb. The purified commercial papain fetches round about 12s. per lb. in the European markets. The following is a statement from the Principal Collector of Customs, showing the exports from Ceylon during the three years 1911, 1912, and 1913. This gives an idea of the local output and the destinations:

Countries to which exported	1911		1912		1913	
	Quantity	Value	Quantity	Value	Quantity	Value
United Kingdom...	4,054	20,320	9,088	34,332	12,705	44,183
Foreign countries:						
Belgium	—	—	76	229	376	1,881
Germany	2,007	11,401	1,708	7,159	2,555	12,705
United States of America ...	550	2,500	2,048	8,948	2,912	13,078
Total	6,611	34,221	12,920	50,668	18,548	71,847

The foregoing particulars have been supplied to us by Mr. H. F. MacMillan, Curator of the Peradeniya Botanic Gardens, Ceylon, and we are able to supplement them with information from other sources. It will be seen that the Ceylon exports during 1913 show a considerable increase over the previous two years, the bulk of which (12,705 lb.) was shipped to the United Kingdom. As stated above, the United States of America is the largest consumer, and at the present time the demand exceeds the supply, as the American importers insist on a light-coloured papain, which is difficult to procure. Besides Ceylon, the chief source of supply for the American trade is the West Indies. Some time ago Jamaica maintained an industry of some importance in collecting and preparing the juice for the market, but it has now shrunk to negligible proportions. Later, the business grew up in the island of Montserrat, which became the chief producer in the West Indies. It is a little doubtful, however, whether the trade is likely to increase. Prices have fallen considerably in recent years, but within the past six months they have shown a distinct advance.

Opinion among large consumers appears to be divided on the present question of the supply and demand, for while some state that the consumption of the drug is on the increase and the prospects are good for marketing larger quantities, others affirm that the only means of extending the market would be in the production of a more carefully prepared product which would replace the cheaper and adulterated grades, of which considerable quantities are sold. In the course of an article on papain in the "Journal of the Royal Society of Arts" (September 1913), the statement was made that

"the United States prefer the inferior qualities from the West Indies, and also desire a white or bleached papain, which the Ceylon natives are not always in a position to supply. Importers, however, could, without much difficulty, procure an almost unlimited supply of the best unadulterated Ceylon papain if they were willing to pay a slightly better price for it than for the West Indian product, and would accept it in its natural state."

The assertion that the West Indian product is inferior to the Ceylon product was contradicted in the "Journal" by Mr. Joseph Sturge, of the Montserrat Co., Ltd., who stated that the facts are the other way about. Mr. Sturge remarked:

"The fact is that West Indian papain is so superior to Ceylon that it sells regularly at a much higher price, and the demand for it can with difficulty be met. We are informed by a large wholesale druggist who buys papain that he is frequently offered the Ceylon make at 7s. and 8s. per lb., but that the quality is always such that he cannot accept it; that it is considered weaker, and that there are complaints as to the quality. This information is confirmed by inquiry in the best-informed quarters."



THE MOUNTAIN PAPAW (*Carica candamarcensis*).
(Naturalised in the hills 5,000 ft. above sea-level.)

Subsequently, Dr. Huybertsz, a well-known authority on papain, took up the cudgels on behalf of the Ceylon product, and proved pretty conclusively that it is the best, but that it had gained a name for inferiority owing to the large amount of adulteration that takes place. He stated that Ceylon papain is sought after and bought locally by purchasers for the American buyers, though it would be much cheaper to get it from the West Indies or Hawaii, which are closer to America; and these same purchasers have credibly stated that they specially require Ceylon papain, owing to its greater digestive qualities. Dr. Huybertsz has conducted extensive experiments on the digestive properties of Ceylon and West Indian papayas, and unhesitatingly affirms that the West Indian papain is, by itself, weaker in strength, and therefore considerably less digestive, than the Ceylon. The latter, he says, will digest from 200 to 300 times its weight of albumen, whereas the West Indian papain will only digest 75, and takes a longer time to do so. It appears, however, that the great difficulty is at present to obtain pure Ceylon papain. Colombo firms, Dr. Huybertsz asserts, owing to their greed, will buy any "rubbish" that is brought to them for sale as papain.

Large quantities of adulterated stuff have been exported, with the natural result that as soon as its inferior, because adulterated, quality was discovered, Ceylon papain became a "drug" in the home markets, and the price fell considerably, so that it does not pay anybody to make and sell pure papain. Dr. Huybertsz states that European and American importers object to papain in its natural colour, and insist that it be white, or at least light. This, he says, is a great mistake, as it can only be obtained by bleaching—a process which sacrifices therapeutic efficiency for pharmaceutical appearance. Genuine papain is slightly saltish and somewhat acrid. It has a peculiar, unmistakable smell, and the "feel" of granular papain should be crisp, like biscuit, and easily crushed between the fingers. When it is doughy or sticky it has been adulterated or badly prepared. It has also slight escharotic action, and collectors of the fresh juice frequently blister their fingers. When mixed with water it has a soapy feel. Its adulterations are many and often difficult to detect, and range from dough and breadcrumbs, coated with the fresh juice and dried, to the addition of guttapercha and wild-cactus milk. The latter has irritant properties, acting as a caustic. Dr. Huybertsz says that the comparative failure of papain as a therapeutic agent is, undoubtedly explained in part by the sophistication to which it has been subjected. Up to a comparatively few years ago the value of papain was little understood, and it was mostly used in making mucilaginous products and chewing-gums. Since then the United States, Germany, and Great Britain have taken considerable quantities, and it enters into many preparations. Recently America has found a new use for the drug, but what this is has not yet transpired.

Dental Notes.

Dental Forceps.

DENTAL forceps should be carefully examined at definite intervals to find out any defects which may have arisen with use. It is a mistake to think that forceps last a lifetime. It will be found that they require to be renewed from time to time. Many failures in extracting teeth might be put down to old and worn-out forceps. The joint, for instance, of the forceps should work easily and without friction. If one handle be held up horizontally, the lower handle should drop easily by its own weight to the full extent allowed by the joint. A little pumice-powder and oil worked into the joint will remedy any stiffness, and afterwards working the joint under boiling water will remove any excess of powder which might clog up the joint. The cutting edges of the blades of the forceps should next be examined to see that they are sharp and not turned over. The sharpening of the blades requires to be done most carefully and only at the expense of the outer surfaces, no more being filed or smoothed off than necessary. The inner surfaces of the blades must on no account be touched, as these are the surfaces which have been made to fit exactly the shape of the tooth, and any alteration would ruin the forceps and render them unfit for use. A fine file followed by the use of a hard stone is the best means of sharpening the blades. Great care must be taken in the cleansing and disinfection of forceps after use. No blood or secretions should be allowed to dry on the forceps. They should be submerged in hot water immediately after the operation, and when the patient leaves they should be thoroughly brushed with a stiff nail-brush and soap and water, the inner surfaces of the blades and also the joints receiving particular attention. The forceps may then be disinfected by boiling for fifteen minutes in a pint of water to which half a drachm of lysol has been added. Instead of boiling they may quite well be disinfected by immersing them for an hour in a 2-per-cent. lysol solution. Lysol in no way discolours the instruments as some disinfectants do, and it is one of the best for all classes of instruments.



Improvement of an Old Pharmacy Interior.

THE interior of an English pharmacy which has been established more than a century has associations, commercial and local, which call for tender treatment at the hand of the renovator. The pharmacy of Randall & Son, Ltd., 146 High Street, Southampton, is such a place. The business was established by William Randall, apothecary and chemist, in 1793, and when describing its history in the *C. & D.* August 31, 1895, it was remarked that "the retail pharmacy has been the haunt of the nobility and gentry since George the Fourth was King, and here are any day to be met with members of the best families and heads of great mercantile houses, who resort thither for that which will make them well." Such customers are inclined to resent obtrusive changes, and their susceptibilities have not been offended by the refitting of the front-counter wall which is illustrated in the above engraving.

The pharmacy is a long one, with double-windowed front, the floor being a few feet above the street. Originally "the shop" (including the back shop) seems to have been about 30 ft. from front to back, which is just exactly the length of the wall-fixture illustrated. Towards the left at the top will be seen a portion of an interior sign, which covers an old oak beam. To the left of this is the bookkeepers' and managing director's office. In front of this there stood, parallel, a counter, which was where generations of apprentices were accustomed to spend a period of their pupilage. The weighing-machine now marks where the end of the counter came to. The entire wall-fitting by Griffiths, Christchurch, is new, replacing older fittings and sustaining, in the main, the former design. We are struck by three features in the "renovation"—viz., the increased accommodation for stock, the improved appearance of the front-counter space and display, and the difficulty of detecting any sacrifice of traditional characteristics.

The fixture is executed in grained mahogany and polished plate glass. The lower portion, with glass doors, is 2 ft. 3 in. high; above it is a row of drawers with panelled fronts, and above these are lift-up bent flaps, which form cases 8 in. high, technically known as piano-cases. The upper portion is a series of ten glazed cases (apart from the central one) 8 ft. high and surmounted by a moulded cornice, with pediment over the central case, which is fitted with a mirror in which a reflection of the counter-side of the pharmacy, with the old top-shelf bottles and jars, can be seen. In the reduction of the original photograph from 19 in. to 6 in. wide the details of the contents of the cases have suffered, but it may still be observed that the central flat case contains hair-brushes, and the piano-cases also are devoted chiefly to toilet-articles, all the rest of the cases being filled with preparations ready to sell.

Councillors' Names.

Over the teacups in the British Museum the writer talked with an expert in name-origins, and he was told how the Councillors of the Pharmaceutical Society of Great Britain got their names.

I WONDER if there are many London chemists who spend an occasional half-holiday at the British Museum. It seems to me to be one of the few places in London where the influence of the war does not permeate, and for that reason its restfulness should be particularly grateful to those whose conversation in the pharmacy and whose very business reminds of the Herculean struggle which is taking place for the liberation of Europe from militarism. There are so many things to interest one, but an excellent plan is to study particular rooms, which is rendered easy by the series of excellent guides sold in the entrance-hall. It was not really of the Museum itself that I set out to write, but of an adventure which befell me recently in the quiet little tea-room, where a limited menu is provided, eminently suited for those of quiet tastes. Opposite to me at the same table was an interesting old gentleman, evidently one of the privileged class called "readers," who have access to the huge reading-room, but human enough to appreciate a cup of tea in the afternoon. A chance remark opened the way to a pleasant conversation. I found my companion—or perhaps I ought to say patron, I felt so small in knowledge beside him—was one of the authorities on the etymology of names, a subject upon which until then I had hardly expended a thought. He holds the view that in the derivation of personal and place names one may learn much that cannot be found in written records. The habits and pursuits of one's ancestors are to be found in names. Pondering over this, I asked him to tell me what he could about my own name, a rather uncommon one, and then I followed with others in rapid succession. Then it occurred to me that I might gain some pharmaceutical knowledge, and being almost in sight of the Pharmaceutical Society's premises I got my companion to tell me the derivation of the names of the Councillors who look after our interests at Bloomsbury. It might also, I thought, afford an insight into

the characters of our representatives. Here are the main points so far as I remember them:

White.—The President's name has two possible derivations. The most commonly accepted is "the white"—*i.e.*, of fair complexion, similar to the personal names Black, Brown, etc. Whether the President is fair I do not well remember as it is such a long time since he has been at Bloomsbury. The other derivation is from "thwaite," a clearing in a wood. Perhaps Mr. T. A. White may fancy the latter derivation.

Weathercoat, the President's understudy, is a place-name; his ancestors came from Nethercote in Northampton. "Nether cot" or cottage would be the dwelling in the lower part of a stretch of country.

Gibson, of which there are two representatives on the Council, is "the son of Gilbert," the latter being abbreviated as a nickname to Gib. There are at least twenty surnames founded on Gilbert.

Allen is the "son of Allen," Aleyn, or Alan.

Bilson caused my friend to give me quite a lecture. It appears that unthinking persons jump at the conclusion that this is merely the "son of Bill," but that is not the case, as Bill is comparatively modern as a nickname. Bilson, it appears, is a corruption of Belson—"son of Bell," *i.e.*, Isabel—or else has some connection with a bill, an obsolete military weapon used chiefly by infantry.

Campkin is probably a diminutive of camp or kemp—a combatant or fighting man. The Cambridge Campkin can certainly look after himself.

Cross signifies "at the Cross"—*i.e.*, one who dwelt by or near the roadside or market cross.

Cuff is of somewhat uncertain origin. There is an obsolete meaning of the word which is to vanquish in fight. Cuff is also, it appears, an old name for a mitten or glove, and one who sold these useful articles might in turn acquire the name.

Currie, or "at the corrie"—*i.e.*, the hollow side of the hill where game usually lies. The lines which Scott wrote in the funeral song of the clansman in the "Lady of the Lake" may be recalled:

Fleet foot in the corrie,
Sage counsel in lumber,
Red hand in the foray,
How sound is thy slumber.

Gifford or Giffard is the "son of Giffard," a Norman name meaning the Liberal. Mr. Lord Gifford's friends will agree as to its appropriateness in his case.

Gilmour is from the Gaelic, gille-mohr, "great servant." The armour-bearer of a Highland chief was so called, and was probably selected for his size and strength.

Hagon is the "son of Hagan," or perhaps Hacon, a name of Norse extraction.

Harrington is "of Harrington" in Cumberland.

Harrison, the "son of Harry." Harry is not a nickname of Henry, but an English attempt at pronouncing the French Henri.

Parry is the Welsh "Ab Harry"—*i.e.*, the son of Harry—or it may be the "son of Peter" from the French Pierre, popularly Parr, whence the pet form Parry. The Welsh derivation in the case of L. M. Parry is to be preferred.

Rogers, "son of Roger." It occurs in Domesday-book as Rogerus Co. Norfolk. The name was exceedingly common in the thirteenth century all over the country.

Russell is a variant of Russell, in its turn a diminutive of Rous, a sobriquet for one with hair or complexion of a reddish brown.

Sergeant, found in many variations, is the sergeant or serjeant, an officer of the law.

Young is "the young" in the sense of junior to distinguish father and son.

Although not of the Council, but always there, I may include the following:

Woolcock, a derivative of Willcock—son of William. Cock implies pertness, especially the pertness of lusty youth. It is also a term of familiarity applied to a sharp and forward lad. Who will dispute that the name fits the man in this case?

Chater is "the escheator," one who inquired into escheats. Escheat was an ancient of feudal law whereby a fief reverted to the lord when the tenant died without leaving a successor qualified to inherit under the original grant. Those who know Mr. Chater will acknowledge the appropriateness of the name.

OVERHEARD.—Two small boys outside shop, gazing at the name on window, "—, M.P.S., pharmacist." "Wot's the meaning of M.P.S.?" "Well, M.P. means 'Member of Parliament,' and I s'pose S. means he's either the sixth or seventh."

Hints on Window-dressing.

I.—By James W. Harper, Starbeck.

In this article the author takes as the basis of his remarks three prize window-displays, which are illustrated with reproductions of whole-plate photographs. The window used is an exceptionally good one, measuring 10 ft. from the base upwards, 10 ft. from end to end, and 4 ft. from front to back.

THE chemist's window answers a threefold purpose; first, it advertises the goods displayed; second, it advertises the shop; and third, it reflects the personality of the chemist. Our windows often act as our introduction to our customers. A clean window is always a good advertisement, and even if we cannot spare the time to be very original in dressing our windows, provided we keep them clean and change them regularly we stand to gain much.

In many shops the rule seems to be that the glass shelves remain almost constantly in the same position. The chemist very seldom thinks it worth while to raise or lower them in order to create a diversion, and seldom do we find a chemist removing his shelves and brackets altogether in order that his display may be unhampered. Yet it is very advantageous occasionally to remove them altogether and allow one's imagination to have free play.



AN ERASMIC DISPLAY.

This was done in the case of an Erasmic window, which is illustrated. The very word Erasmic seems to breathe a spirit of fragrance and daintiness—

Wafting "o'er intervening seas
Sweet odours from the Hesperides."

The decoration in this case ought to be light and artistic. The large background of the display was drawn upon strong white paper in sections. After being shaded in chalks, the pieces were fastened together with secotine, and the whole mounted upon an art-green background which measured almost 10 ft. square. The goddess "Erasmic" was represented by a doll 3 ft. high. She was dressed in a white Greek costume, upon which the key-pattern embroidery is noticeable. She is seen in the illustration holding a tray, upon which was displayed the Erasmic goods. At her feet was a very large vase containing about 200 tablets of Erasmic soap.

Suspended from the shrine, and round the columns, were festoons of artificial violets intertwined with smilax, and festoons of smilax decorated the front of the window.

Letters for window-display are very readily cut out of white shop-paper (familiar to us all as "demy," though that means the size and not the quality of the paper). It is first cut into strips of the required breadth; the letters are then roughly sketched in with lead pencil and cut out with a pair of sharp scissors.

The second window illustrated advertised Bovril. In this case the glass shelves remained fixed. Four tableaux

were in this display, each about 3 ft. in breadth. The top tableau told customers that Bovril is always at the summit of Perfection. The tableau underneath was arranged as a cemetery—bovril represented by a model bullock gazing upon the tombs of his ancestors; the tombstones being jars of bovril arranged in the form of crosses. The grass was composed of artificial moss, and the background of the cemetery was made up of small branches of hawthorn gathered from the hedgerows and arranged as trees, the trunks being stuck into small vials and covered with moss. Immediately underneath came another tableau—Bovril in the sick-room. The doctor and nurse were seen on either side of the patient; a pot of invalid bovril was on a table by the nurse. In arranging a tableau of this description care should be taken that everything is in exact proportion as regards size, while the furniture, etc., should always be of the best. I paid 6s. 6d. for the little brass bedstead for the patient. The costumes, etc., should always be scrupulously correct if one wishes a window to attract attention.

The fourth tableau represented bovril in the nursery. In this case the principal object was a model doll holding a pot of bovril in her right hand, and extending her left to tell our customers that she thrives on it.

The third of the displays illustrated advertised Wright's Coal-tar Soap. In this case, also, all the shelves and brackets were removed. The large bridge measured 6 ft. long by 3 ft. deep, and was made of wood. In grooves boxes of the soap were placed, the spaces between the boxes being filled in with artificial moss.

A notice-board will be observed. It bore the following inscription:

NOTICE.
Germs and microbes
Caught here.

Under the bridge ran a river, made up with green crinkled paper. Three figures were on the bridge. The

left. I should like to draw attention to the lettering on the window. It will be noticed that the words are quite evenly placed, which is a very simple matter if one works from the centre to the sides.

It may be asked, "Does window-dressing pay?" In my case it has paid very well indeed. The Bovril



A WRIGHT WINDOW.

Company sent me 50l. for the Bovril window, and several other firms have been equally generous; but it is also worth doing for its own sake.

I should like to add a few words about doll-dressing for window-display. The doll looks far too stiff and wooden as a rule. The first essential is to try to introduce character into the face. A good paint-box is necessary, and a few deft touches with the brush often make a doll's face look quite human. The hair may have to be tinted to match the complexion. Venetian red answers very well for giving a ruddy tint either to hair or complexion, while the wrinkles may be put in with a few touches of brown paint. The clothes must frequently be padded in order that the character may be quite correct. Half a pound of cotton wool placed under the waistcoat will improve the appearance of a landlord, for instance. A doll may be made quite easily to smile or look glum. One is reminded of Tennyson's Wealthy Miller whose

"Slow, wise smile that, round about

His dusty forehead drily curl'd,

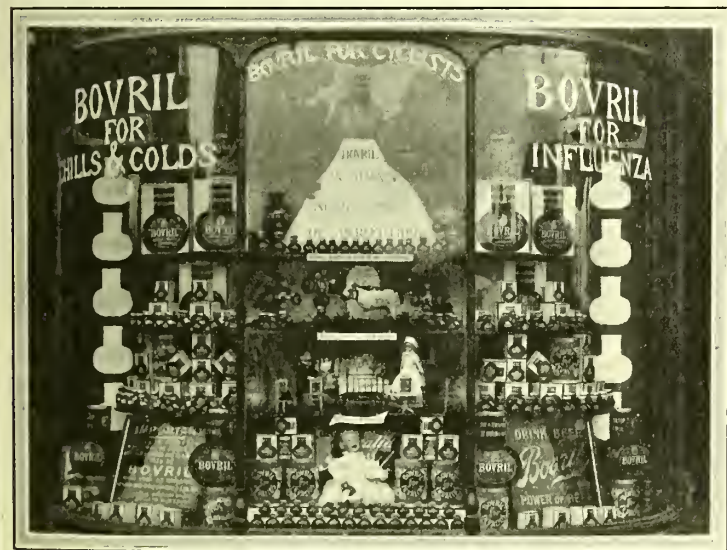
Seem'd half-within and half-without,

And full of dealing with the world."

When we can introduce an expression like that on a doll's face we then have reason to feel that we have not laboured in vain.

II.—By D. Llewellyn Jones, Colwyn Bay.

The question "Does it pay to spend money on a window-show of one's own specialities?" has doubtless occurred to many of your readers at one time or another, and in almost every case dismissed without trial when the expenditure mounted into pounds rather than shillings. In these observations I give my own experience in only one instance, and I trust I will be able to prove that once the public attention is drawn to a window by some striking novelty sales are bound to follow.



A 50L. BOVRIL WINDOW.

man in the centre was fishing with a tablet of Wright's coal-tar soap as bait, and in the picture he is seen just hooking a large microbe, "Germitis." Another species, which I called "Microbia," is also seen on

The article shown was a bronchial lozenge selling at 2d. per oz., and costing 1s. 2d. per lb., for which I had a fairly steady sale, totalling perhaps 40 to 50 lb. in the course of a winter. As an experiment I determined

to make a "splash" with them as a Christmas attraction. I purchased a small electric locomotive, gauge 0, with tender, having imitation coal, three long bogie coal-wagons, two small goods-wagons, and a brake-van, all in L.N.W.R. colours, a set of rails to form an oval the size of my window, and half-a-dozen telegraph-poles. Black wool was used for "wire," and an adapter to utilise the electric current from the main. By means of this adapter a current of four to eight volts at about one ampere serves to drive the train at no cost of current or batteries when the shop-lights are in use. The background was painted in distemper on an old piece of canvas, white distemper only being purchased, the other colours being made as required with all sorts of odds and ends of colours. The cottage and Father Christmas were cut out of cards, also the tunnels, being painted where necessary to represent stonework.

The idea of making, or rather of starting, a background is the greatest bugbear, but once it is started any novice can make a sufficiently presentable one with very little trouble. First determine the size required, and cut out a piece of calico or canvas to fit the window, tack it up on a wall in the attic or cellar, and mark in crayon



A BRONCHIAL-LOZENGE WINDOW.

the outline, then dab the paint on as realistically as may be. When dry a batten at each end is all that is required to stretch it for the window.

The floor of the window was covered with white lint, four heaps of the lozenges put at intervals with showcards between the heaps, the trucks were loaded with lozenges, and when the current was turned on the train moved round the window, in and out of the tunnels regularly without any attention for hours. I frequently had it running for eight hours a day with no attention except occasional oiling, and no danger of fire or short-circuiting.

The cost of the whole outfit was about 4*l.*, of which I recovered 2*l.* by selling it to a brother chemist. How did it affect the sales? My previous winter's sale of the lozenges was 40 lb., showing a profit of 1*s.* 6*d.* per lb.—3*l.* By means of the window-show, in eight weeks I had sold 2 cwt., showing a profit of 16*l.* 16*s.*, or an increase, after deducting the cost of the window-show, of 12*l.*, to say nothing of a magnificent advertisement.

Another year, for an attraction with the same lozenges, I rigged up an airship, stationary, but with electric lights and propeller going, together with a smaller one travelling round it suspended from a rail attached to the top of the window, both loaded with the lozenges. This show cost about 2*l.* or 2*l.* 10*s.*, and proved as great a success as the train.

KUTH-ROOT grows wild in the forests of Cashmir at elevations of 8,000 to 9,000 ft. It has a scent like orris, with a slight blend of violet. The root is exported chiefly to China, where it is used as an incense in the Buddhist temples and monasteries. It is also a disinfectant, and is locally used, in the form of a powder, as an insecticide. Its use in India is confined to medicinal purposes.

Chemists' Windows.

Photographs of windows sent to the Editor for reproduction should be accompanied by notes on how the displays were arranged.



From Tudor Times.

The above illustration shows well the fine old premises of Woodhouse & Son, 45 Bull Ring, Ludlow, which have been renovated recently. The house was built nearly four hundred years ago in Elizabethan times, but the woodwork had been plastered over for the last hundred years or so. The original surface has now been restored, and this immense improvement to the front makes the pharmacy a striking landmark in the town.



A War Window.

Mr. H. A. Martin, of Leicester, sends the photograph from which the above is reproduced. He states that the lettering is pasted on window: red, white, and blue ribbon is stretched across the window, with a poster stuck in the centre. The forts in centre and sides are built up of actual goods, and are surmounted with cannon and Union Jacks flying. Along the walls from fort to fort are showcards, suspended by means of red, white, and blue ribbon from top of window. Curtains at back complete the display. The soldier's outfit consists of boracic ointment, antiseptic powder, and foot-powder, retailing at 6*d.* packed in tin box.

Have war windows been plentiful or productive? Mr. Martin's is the only photograph of the kind that we have received. It may be that the somewhat common opinion that the war is bad for the chemist's business has prevented enterprise in this direction, but, unfortunately,

it is not too late for chemists to mend their ways in this respect. In many districts of the country chemists have never been so busy as they are now. This is particularly the case on the East Coast, and it would be interesting to learn how chemists have attracted and kept khaki customers.

Some American Window-displays.

The windows of G. B. Evans, Philadelphia, are among the most attractive of American drug-stores. Through the courtesy of Mr. William Kirkby, M.Sc., we have the opportunity of reproducing three photographs of special displays made by Mr. Evans.

The first shows the style of the window, which is spacious and handsomely fitted. This illustrates a "Doggie" display. Right in front of the window is a plain white card,



A "DOGGIE" DISPLAY.

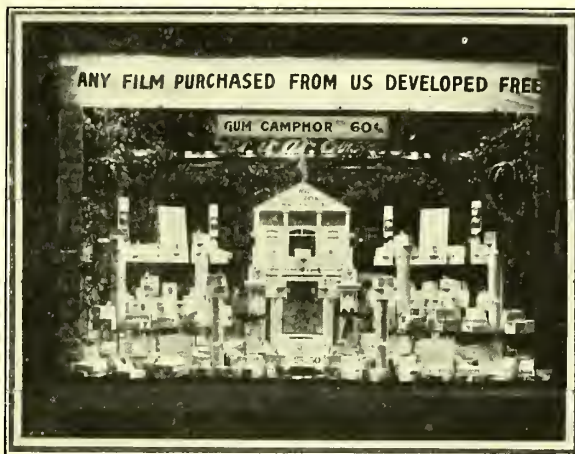
with the simple words "For the Dog." The display consists of dog-soap, sponges, combs, brushes, towels, and everything else required for a dog's toilet, besides collars and Sergeant's dog-remedies, a list of which is given upon a



A SILVER-GOODS DISPLAY.

showcard. We have never seen a chemist's window in this country fitted up in this way, although some of the best 'gauciers' are pharmacists.

The second photograph is of a "Dolly Varden" window. A showcard in front of the fine model bears the words "This is one of Evans's Drug-stores." The display consists of Rogers Bros.' cutlery and silverware, including spoons and forks of all kinds, carvers, etc., besides articles for the toilet-table, candlesticks, and silver-mounted glass bottles and jugs. In the windows of Evans's drug-stores the poster



A STATIONERY DISPLAY.

on the top is a regular feature. In addition to what is seen in the third illustration (this being a display of W. & W. "Exclusive Stationery"), we find the following lines also used right across the top of the window:

"Are you looking for a drug-store?"
 "Drugs from all over the World."
 "Telephone your Order, we Deliver—Filbert 3350."
 "Have your Friends met you Here."
 "Evans's Soda, Ice-cold."

At the Counter.

A MANOR PARK CHEMIST (234/23) had the following experience on a recent Sunday:

Much ringing of bell by small boy. When he got in he said: "Please, the doctor sent me for two-penn'orth of linseed-meal. It's for a murder case." He meant emergency.

EXAMPLES OF MODERN EDUCATION sent to us by a Google subscriber include the following items which crossed his counter:

1*l.* ippecakuanna wine, bottle fennings fever cure.
 Penny of Hykrapricy.
 1*l.* of sliperyalum.

The originals beat the reproduction from cold type. "Creamey Tartar" and "Senel pods" are new variants of familiar things, but the best of the bunch is the following recipe:

Blood Mixture.

$\frac{1}{2}$ oz. of Sarperlla.
 $\frac{1}{2}$ oz. of cannimiles.
 $\frac{1}{2}$ oz. of Gentin.
 1*l.* of best Spanish.

Boil quart of water. Simmer down to 1 pint.

"You occasionally publish rather amusing 'howlers'" (writes "J. R." Manchester, 227/27). "Here are a few: 'Borax and Onions.' 'Tincture of Asses' feet.'"

This, I understand, was meant for asafetida. 'Pigeon's milk' is invariably asked for, while the loan of a 'Straight hook' for the butcher round the corner may be quite original to some pharmacists. Though this may seem a joke on the poor chemist, on the other hand the chemist sometimes gets his own back. For instance, only the other day I was handed a note: 'Kindly give bearer three-pennyworth of indiarubber tacks and supply a glass hammer for same.' An old rubber cash mat sufficed for the 'tacks,' but regretted our being out of stock of 'glass hammers.'"

Insurance Pharmacopœias.

WHILE examining a number of local Pharmacopœias which have been issued by local Medical Committees and Pharmaceutical Committees in connection with Insurance dispensing, we have been struck by the diversity of the prescriptions for preparations of the same designation. Thus the conditions already observed in our "Provincial Hospital Pharmacopœias" and in Squire's "Pharmacopœias of the London Hospitals" are repeated. Without discussing the reflections which arise in considering this state of things, we present these diverse prescriptions for the same thing and same purpose. Each of the formulas is given in a single dose, and the quantities, being in parallel columns, are easily compared. Each column is numbered, and the name of the district, with alternative name for the prescription, is placed at the bottom of the formula.

Mistura Acida.

	1	2	3	4	5	6
Acid. nit. hyd. dil.	15 m.	7½ m.	15 m.	10 m.	7½ m.	15 m.
Spt. chloroformi	—	—	—	10 m.	—	—
Infus. quassie	to 1 oz.	—	—	—	—	—
Infus. gent. co.	—	½ oz.	1 oz.	½ oz.	½ oz.	180 m.
Aqua	to —	—	—	—	—	240 m.

1, Birmingham, Mist. acidi nitro-hydrochlorici; 2, Bournemouth, Mist. acid. et gent.; 3, Gosport, Mist. acida gentianæ; 4, Hull; 5, Gateshead, Mist. gentianæ (acid); 6, Sheffield, Mist. gentianæ acida.

Mist. Acida Composita.

	1	2	3
Acid. nit. hyd. dil.	10 m.	10 m.	10 m.
Tinct. nucis vomice	5 m.	—	—
Ext. nucis vom. liq.	—	1 m.	—
Spt. chlorof.	10 m.	—	—
Glycerin.	—	30 m.	—
Tinct. gent. co.	—	30 m.	—
Infus. quassie	—	—	½ oz.
Infus. calumbæ	to 1 oz.	—	—
Aq. chlorof.	to —	—	1 oz.
Aq.	to —	½ oz.	—

1, Birmingham, Mistura acida c. nuc. vomice; 2, Dorset; 3, Leicestershire.

Mist. Acida c. Opio.

	1	2	3	4
Acid. sulph. dil.	10 m.	15 m.	10 m.	10 m.
Tinct. opii	3 m.	6 m.	10 m.	10 m.
Tinct. capsici	—	2 m.	3 m.	3 m.
Aq. chlorof.	to —	—	½ oz.	1 oz.
Aq. menth. pip.	to 1 oz.	—	—	—
Aq.	to —	½ oz.	—	—

1, Birmingham; 2, Dorset, Mist. acidi sulphurici c. opio; 3, Hull; 4, Leicestershire.

Mist. Alba.

	1	2	3	4	5	6	7	8	9	10	11	12
Magnes. sulph.	40 gr.	30 gr.	60 gr.	60 gr.	60 gr.	60 gr.	60 gr.	40 gr.	60 gr.	60 gr.	60 gr.	45 gr.
Magnes. carb.	20 gr.	10 gr.	10 gr.	10 gr.	10 gr.	15 gr.	15 gr.	10 gr.	10 gr.	10 gr.	10 gr.	15 gr.
P. zingib.	—	—	—	—	—	1 gr.	—	—	—	—	—	—
Ol. menth. pip.	—	—	—	—	—	—	—	—	—	—	—	—
Spt. chlorof.	10 m.	—	—	—	—	—	—	—	—	—	—	—
Aq. menth. pip.	to 1 oz.	½ oz.	½ oz.	½ oz.	1 oz.	—	1 oz.	½ oz.	1 oz.	½ oz.	—	½ oz.
Aquam	to —	—	—	—	—	½ oz.	—	—	—	—	½ oz.	—

1, Birmingham, Mist. alba vel mist. magnesi carbonatis; 2, Bournemouth; 3, Bradford, Mist. mag. sulph. et mist. alba; 4, Doncaster; 5, Dorset; 6, Gateshead; 7, Gosport; 8, Hull; 9, Leicestershire; 10, Liverpool; 11, Sheffield; and 12, West Hartlepool. * Pond. † Levis.

Mist. Acida c. Strychnina.

	1	2	3
Acid. hydrochlor. dil.	10 m.	—	15 m.
Acid. phosph. dil.	—	15 m.	—
Liq. strychnin. hyd.	2½ m.	5 m.	—
Tinct. nucis vomice	—	—	20 m.
Tinct. aurantii	—	—	½ oz.
Aq. chlorof.	to 1 oz.	—	—
Infus. calumbæ	to —	1 oz.	—

1, Birmingham; 2, Gosport, Mist. acid. phosph. et strychn.; 3, Hull; Mist. acid. phosphoric.

Mist. Acida pro Tussi.

	1	2
Syrupi	40 m.	40 m.
Oxymel. scillæ	30 m.	30 m.
Vin. ipecac.	10 m.	10 m.
Glycerin.	20 m.	20 m.
Acid. sulph. dil.	5 m.	5 m.
Liq. cocci, B.P.C.	1 m.	3 m.
Aq.	to ½ oz.	1 oz.

1, Hull; 2, Leicestershire.

Mist. Ammonii et Ætheris.

	1	2	3
Ammon. carb.	—	—	5 gr.
Spt. ammon. arom.	15 m.	30 m.	—
Spt. ætheris	15 m.	30 m.	10 m.
Aq. camph.	to 1 oz.	—	—
Aq. chlorof.	to —	—	½ oz.
Aqua	to —	½ oz.	—

1, Birmingham; 2, Sheffield; 3, Doncaster.

Mist. Ammon. c. Scilla.

	1	2
Ammon. carb.	4 gr.	4 gr.
Ammon. chlor.	—	4 gr.
Tinct. scillæ	10 m.	10 m.
Aq. chlorof.	to ½ oz.	—
Aq.	to —	1 oz.

1, Bournemouth; 2, Gosport.

Mist. Ammonia et Senegæ.

	1	2
Ammon. carb.	3 gr.	2½ gr.
Ammon. chlor.	15 m.	7½ m.
Tinct. camph. co.	15 m.	—
Infus. senegæ	to 1 oz.	½ oz.

1, Birmingham; 2, West Hartlepool.

Mist. Ammonii Picratis.

	1	2
Sol. ammonii picrat. sat.	5 m.	5 m.
Aqua	to ½ oz.	1 oz.

1, Hull; 2, Leicestershire.

Mist. Anti-Asthmatica Composita.

	1	2
Sodii iodid.	8 gr.	8½ gr.
Sodii bromid.	8 gr.	8½ gr.
Tinct. euphorbiæ	10 m.	7½ m.
Liq. trinitrimi	1 m.	1 m.
Tinct. lobel. æth.	8 m.	7½ m.
Aq.	to ½ oz.	½ oz.

1, Hull; 2, West Hartlepool.

Mist. Antimonialis.

	1	2
Ammon. chlorid.	—	20 gr.
Vin. ipecac.	10 m.	—
Vin. antimon.	10 m.	30 m.
Aq. chlorof.	to 1 oz.	1 oz.

1, Birmingham; 2, Leicestershire.

Mist. Astringens.

	1	2	3
Acid. sulph. aromat.	15 m.	10 m.	—
Acid. sulph. dil.	—	—	15 m.
Tinct. opii	5 m.	5 m.	7½ m.
Tinct. card. co.	—	10 m.	—
Chloroform	—	—	½ m.
Aq. chlorof.	to ½ oz.	—	—
Decoct. hæmatoxyli	—	½ oz.	—
Aqua	to —	—	½ oz.

1, Bournemouth; 2, Liverpool; and 3, Sheffield.

Mist. Asafetida Composita.

	1	2
Asafetida	—	2½ gr.
Tinct. asafetida	15 m.	—
Tinct. valerian. ammon.	15 m.	—
Ext. casc. sag. liq.	—	5 m.
Ammon. carb.	—	2½ gr.
Magnes. sulph.	15 gr.	—
Infus. quassie	to 1 oz.	—
Infus. valerianæ	—	½ oz.

1, Birmingham; 2, Hull.

As space and time permit we hope to continue this comparison of stock-mixture formulæ. In order to assist us in the preparation of the comparisons we would be obliged if secretaries or members of local Pharmaceutical Committees would send us notes or formulæ.

Royal Institution.

THE first Friday evening discourse of the present session at the Royal Institution was given on January 22 by Professor Sir James Dewar. The inhospitable weather thinned the attendance—usually very crowded when Sir James lectures—but those present were amply rewarded for any inconvenience in reaching the Institution. The subject was

PROBLEMS OF HYDROGEN AND THE RARE GASES,

and it was illustrated by many experiments, which, with the aid of several assistants, were all successfully carried out. Reference was made to the lecture of a year ago on the vacuum-flask, at which a new type of vessel was shown applicable to calorimetry at low temperature. Accurate means of measuring gases are specially required in low-temperature work, where the amounts dealt with are so minute. More work has been done during the year on the uncondensable gas of the air at 20° absolute. It is found that nitrogen obtained by different chemical methods varies according to the means taken for removing oxygen and hydrogen. The amount of uncondensable gas in air from different sources varies, and also that from respired air. A few experiments were interposed to show the methods of detecting gases spectroscopically, and also the uses of charcoal and liquid air for obtaining vacuums. Next attention was drawn to the variation of the amounts of helium, neon, and hydrogen in air samples, and reference was made to Moureu's experiments on the gases of the mineral springs of France. The purport was to show that the proportion of helium varies enormously. It occurred to the lecturer that occlusion of some of the gases might occur in the solidified gases of the atmosphere when cooled by liquid air. Experiments were made with synthetic mixtures of hydrogen, nitrogen, and carbonic-acid gas, and also with the gases separately, to see whether occlusion occurs. It was found that no occlusion resulted from the gases separately, but with nitrogen and hydrogen together an apparent occlusion resulted. Evidence was collected to show that hydrogen is occluded in solid nitrogen or carbonic oxide forming a solid solution. The next part of the lecture dealt with the transmission of gases through platinum and palladium. The metals were arranged in the form of fine tubes connected to an electrode-less discharge-tube in communication with a cooled charcoal exhauster. As soon as one of the metal tubes was put into a flame a discharge passed in the discharge-tube, indicating that hydrogen had passed in from the flame. Using a Meker gas-burner, it was possible to show that the quantity of hydrogen varied in different parts of the flame. A quartz tube over the metal tube stopped the action, but a further experiment showed that even quartz is permeable to helium. The quantitative apparatus used is designed with liquid-air traps to prevent the intrusion of organic matter from the lubricants used with the stop-cocks or other sources, and enables manometric measurements to be made by means of the difference of level of a suitable liquid, such as sulphuric acid, in the two arms of a U-tube. A further series of experiments was performed to show the diffusion of the gases of the atmosphere through rubber films. Work has been done on this subject before, but a new method has been devised of performing the experiments. The film is mounted on a shallow metal cup and supported on copper gauze, so that there is no free space. The film is sensitive to heat, gases easily pass when the film is warm, but when frozen by liquid air the rubber is impermeable. Water-vapour passes, but a film of glycerin stops the permeability. A number of different gases were passed, and it was shown that the kind of gas could be detected by the rate of passage.

BUST OF SIR HUMPHRY DAVY.

At the conclusion of the lecture Professor Sir James Dewar said he had a pleasant duty to perform in presenting to the Institution, on behalf of the nearest rela-

tive of Sir Humphry Davy, a bust of that distinguished scientist so intimately connected with the early days of the Institution. The donor was Dr. H. D. Rolleston, senior physician of St. George's Hospital, grand-nephew of Sir Humphry, who is at present acting as consulting physician to the Navy. It is interesting to recall that Dr. Thomas Young, one of the three founders of the Royal Institution (the other two were Count Rumford and Sir Humphry Davy), was also physician to St. George's Hospital. Sir James traced the history of the bust, and then gave some details of Davy. He referred to the fact that a century ago the nation was at war with France, but, notwithstanding this, so great was Davy's reputation and the belief in the international character of science, that Napoleon readily gave him and Faraday permission to visit Paris, where the greatest consideration was shown them. It is a little difficult, said Sir James drily, to imagine similar courtesy being accorded a British man of science in Berlin at the present day. Davy accepted the Napoleonic prize of the French Academy of Sciences with the same idea that men of science should soften the asperities of war.

Sir James Crichton-Browne, on behalf of the Duke of Northumberland, accepted the bust for the Institution, and unveiled it for the audience to see. He mentioned that the sculptor was Samuel Joseph, and that the bust was executed in 1822. He also referred to the fact that Davy was apprenticed at Penzance to an apothecary and surgeon, as were several other well-known scientists, and added that medical studies seem to act as a stimulating introduction to a career of chemical and physical research. The Institution already possesses two busts of Davy, one, the gift of Dr. Rudolph Messel, being in bronze. It is intended to place the new acquisition in the entrance-hall, near the beautiful statue of Faraday. Sir James then drew attention to the fact that this is the centenary of Davy's invention of the miners' safety lamp. He mentioned that although Davy did not receive any monetary advantage from his discovery, the mine-owners of Newcastle presented him with a silver dinner-service. This was bequeathed to the Royal Society and melted down produced 700*l.* from the sale of the silver. This money is the capital sum, the interest upon which is used by the Royal Society for producing the Davy medal. Finally Sir James recalled a famous scene in the Royal Institution laboratory in October 1807, when Davy succeeded in isolating potassium and sodium and danced with delight.

The exhibits in the library included silica glass, British-made laboratory-ware and filter-paper, and instruments for naval and military use. In glass cases were also shown relics of Davy, which Miss Davy presented to the Institution.

British Laboratory-ware Association.

THIS Association has been formed for the purpose of promoting and placing on the market glass and porcelain, laboratory ware, and filter-papers of British manufacture. The chairman is Mr. C. A. Mercer, of Townson & Mercer, Ltd. The following are the members of the Association:

Baird, A. H., 33 Lothian Street, Edinburgh.
Baird & Tatlock, 45 Renfrew Street, Glasgow.
Becker, F. E., & Co. (W. & J. George, Ltd.), London.
Brady & Martin, Ltd., Newcastle-upon-Tyne.
Ferris & Co., Ltd., Union Street, Bristol.
Gallenkamp, A., & Co., Ltd., London.
George, W. & J., Ltd., 157 Charles Street, Birmingham.
Griffin, J. J., & Sons, Ltd., Kingsway, London.
Harris, Philip, & Co., Ltd., 144-146 Edmund Street, Birmingham.
Harrison, Parkinson & Co., Sun Bridge Road, Bradford.
Jackson, Fred., & Co., Ltd., Salford, Manchester.
Preston, J., 105 Barker's Pool, Sheffield.
Reynolds & Branson, Ltd., 14 Commercial Street, Leeds.
Southall Bros. & Barclay, Ltd., Birmingham.
Standley, Belcher & Mason, Ltd., Birmingham.
Towers, J. W., & Co., Ltd., Victoria House, Widnes.
Townson & Mercer, Ltd., 34 Camomile Street, London.
Woolley Sons & Co., Ltd., Victoria Bridge, Manchester.

Germicidal Value of Iodine.

By T. Maben, Ph.C., F.C.S., and J. Stanley White, Ph.C.

MEDICAL opinion concerning the utility of iodine as an agent in the production of asepsis has oscillated between contemptuous neglect and unqualified praise. Enormous quantities of iodine, mostly in the form of tincture, are being used at the present time for sterilisation purposes, and the question is being discussed whether iodine is of any value in this connection. Numerous

with an equal volume of water, making in each case a 1½-per-cent. solution of iodine. An active twenty-four hours' culture of *Bacillus typhosus* in nutrient broth was filtered through sterile filter-paper, in order to prevent the bacteria "clumping," and five drops introduced into the solutions of carbolic acid and iodine at intervals of thirty seconds. Subcultures in standard broth were then taken every thirty seconds up to fifteen minutes, the whole operation being carried out at 20° C. These were then incubated at 37° C. for forty-eight hours, and examined for growths or otherwise. The following are the details of the test:

TEST ORGANISM: ACTIVE 24 HOURS' CULTURE B TYPHOSUS.

Sample	Dilution	Time Culture Exposed in Minutes						Sub-cultures	
		2½	5	7½	10	12½	15	Period of Incubation	Temperature
Tincture of iodine	½ strength (diluted with alcohol)	—	—	—	—	—	—	48 hours	37° C.
Aqueous solution of iodine	½ strength (diluted with water)	—	—	—	—	—	—	"	"
Carbolic acid... ..	1 : 100	+	—	—	—	—	—	"	"
Carbolic acid... ..	1 : 120	+	+	+	—	—	—	"	"

+ = growth in the sub-cultures.

— = no growth in the sub-cultures.

letters bearing on the subject have appeared in various medical journals, and apparently the problem still remains unsolved.

Reference has been made in these columns to recent controversy on the subject by British surgeons, such as Sir Watson Cheyne, Bart. (*C. & D.*, 1914, II., 711); but before that Decker ("Deutsche Med. Woch.," 1911, 23) came to the conclusion, from experiments, that tincture of iodine has no bactericidal action; while Bruening ("Arch. für Klin. Chir.," 1911, 94) concluded that tincture of iodine has a greater bactericidal power than either 96-per-cent. or 65-per-cent. simple alcohol, and the painting of the skin with iodine tincture reduces to a greater degree its liability to infection than does under similar conditions either of these two alcohols. Here was division of opinion. In the "British Medical Journal," October 28, 1911, Charles Leedham-Green described cultural experiments on non-spore-bearing organisms, which showed that tincture of iodine made with 70-per-cent. alcohol sterilised in seven minutes, and in ten and a-half minutes if of official strength. Sublimate spirit 1 : 1,000 sterilised in two and a-half minutes, while an aqueous solution of mercuric chloride was stated not to sterilise in thirty minutes. Experiments on the skin were also conducted, among the conclusions being that tincture of iodine made with 70-per-cent. alcohol is more potent than alcohol alone, but is not so powerful as sublimate spirit; neither, it was stated, guarantees sterility. It was also proved that, while an aqueous solution of iodine possesses decided germicidal properties, it is less potent than plain 70-per-cent. alcohol, which, in its turn, was inferior to tincture of iodine made with 70-per-cent. spirit. Sir Rickman J. Godlee, Bart., in a letter to the "B.M.J.," November 7, 1914, on "Antisepsis and Asepsis in War," states that if iodine is employed, a saturated watery solution is best, as alcohol much diminishes the effect.

In view of these differences of opinion, we felt it necessary to determine to what extent the alcohol is responsible for the germicidal action of tincture of iodine. Two solutions were prepared—one spirituous, the other aqueous, both of the same iodine-strength. The method adopted was a slight modification of Rideal-Walker's. Two dilutions of carbolic acid, prepared from a standard solution of carbolic acid, were employed in the test—namely, 1 : 100 and 1 : 120—each dilution containing 5 c.c.

According to Sir Watson Cheyne's statement, tincture of iodine (a 2½-per-cent. solution) should be slightly stronger than a 1 : 50 carbolic-acid solution, and the tincture was therefore diluted to one-half, rectified spirit being used for the purpose. In preparing the aqueous solution it was found necessary to use 5 per cent. of potassium iodide, owing to the fact that the iodine is not soluble in water with the amount of potassium iodide ordered in the official tincture. This solution was diluted

From the above data it will be seen that both tincture of iodine and aqueous solution of iodine of only half-strength are much more powerful than carbolic-acid solution 1 : 100, the latter killing the organism in five minutes, whereas both the iodine solutions killed in less than two and a-half minutes.

It was therefore necessary to dilute the iodine solutions still further, and the next test was made with ½-per-cent. dilutions, rectified spirit being the diluent for the tincture, and water for the aqueous solution. This test again showed no growth in the case of all the iodine solutions, but the growths were the same in the carbolic dilutions. Tests were also made with ¼-per-cent. dilutions, again without growths; and it was not until the solutions were diluted down to ⅛ per cent. that any growths were obtained in sub-cultures.

From this comparison, therefore, it is evident that the killing-power of iodine, in the form of alcoholic or aqueous solution, on a naked organism such as *B. typhosus*, is at least four times more powerful than that of a solution of carbolic acid of the same strength.

We have not thought it worth while to determine the relative germicidal values of freshly made and old tincture of iodine, since it appears to us that the figures quoted go to prove that the demand for freshly made tincture appears to be based on a misconception. Further, the advantage claimed for tincture of iodine over an aqueous solution does not appear to be warranted. It is interesting to note that, according to Hewlett, the carbolic-acid coefficient of absolute alcohol is only 0.03, so that it would seem that the alcohol plays a subordinate part in the germicidal action. At the same time, our figures do not harmonise with Sir Rickman J. Godlee's statement that the addition of alcohol diminishes the effect. On the contrary, one would be disposed to argue that the cleansing, penetrating power of the alcohol ought to be distinctly beneficial when applied to the skin.

The results are very striking, and would appear to negative Sir Watson Cheyne's opinion that tincture of iodine is only equal to ½-per-cent. carbolic lotion. It could, of course, be argued that solutions of iodine and solutions of carbolic acid do not act except in the presence of organic matter, but in these tests the introduction of a definite proportion of extraneous matter was not thought to be necessary, since the tests were strictly comparative.

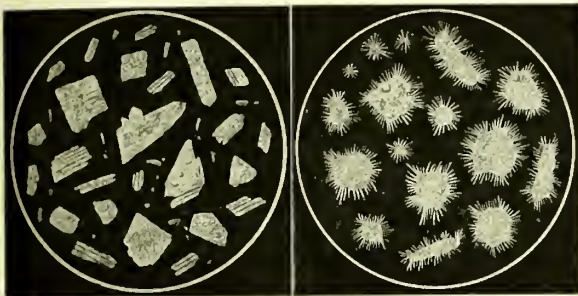
In discussing the remedial value of iodine it must be remembered that, independently of its actual germicidal activity, it is said to possess a therapeutic quality due to the hyperæmia it induces. The increased flow of blood thus occasioned would not only tend to increased phagocytosis, or intracellular destruction of micro-organisms in the neighbourhood of the wound, but would naturally result in more rapid healing of the parts affected.

Brucine Micro-reactions.

By James Scott.

BRUCINE is unique among alkaloids in so far that it responds to three definite reactions in a very emphatic and conspicuous manner. These are its capacity for reddening with nitric acid, the formation of yellow scaly crystals of kakotelin, and the occurrence of oxalic acid. These tests provide a certain guide for the analyst when distinguishing between brucine and strychnine, which accompany one another in all the nux-vomica yielding plants.

The best source of brucine, which is bitter and acrid, is the false *Angostura* bark, in which the proportion of



No. 1. — Semi-crystalline granules of brucine, magnified. The actual diameter of the disc was about one-twenty-fourth inch.

No. 2.—When water is poured over the brucine granules of No. 1 needle-crystals are immediately deposited upon them, as shown above magnified. The actual diameter of the disc was about one-twenty-fourth inch.

strychnine to brucine is much less than in any other plant. In the experiments from which I prepared the illustrations, pure brucine only was used. This is a white granular powder, the particles of which present, under the microscope, semi-crystalline shapes of the kind shown in fig. 1. The majority of them are opaque, while the remainder are semi-transparent, and definitely scored lengthways, the segments readily separating and dissolving apart from one another when the brucine is lying in water.

Brucine melts at 150° into a pale yellow fluid, which can be very deeply browned at higher temperatures. The film formed in this way on a glass slide cracks during cooling into characteristic figurings representing branches and twigs of leafless trees. Many resins behave somewhat similarly, but there appear to be details of this splitting in regard to brucine which call for further consideration, because it generally presents a uniformity of design instead of the irregular criss-crossing so noticeable in connection with other melted substances.

While it is usual for the analyst to speak of *sublimed* brucine, the products derived by heating the substance should be regarded as those of decomposition rather than of true sublimation. The condensed mists, which settle at 185°, present, when magnified, hardly more than a transparent, syrupy filigree as though minute globules had run indiscriminately into one another. Sometimes the filigree is mesh-like; and a similar pattern may often be detected at the bottom of the film of melted brucine on the lower glass.

Although it is true that in a fully melted sample of brucine the film discloses only the lines mentioned, it is possible to produce minute crystals by only partially melting the substance and then allowing it to cool. In such a case, as the minute particles of the heated powder are cooling, tufts of needle-crystals of the kind shown in fig. 4 occur in the semi-transparent portions, and help to render it rather opaque.

Upon adding water, even distilled, to the normal granules of brucine, minute needles begin to form all over

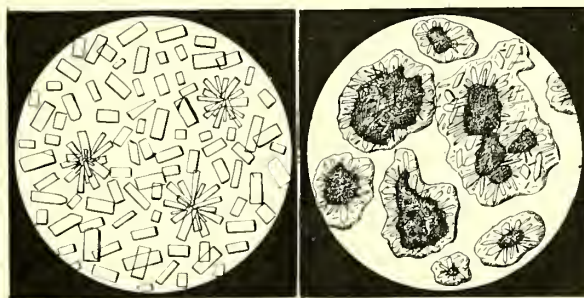
them, apparently shooting out rapidly from their surfaces. This conduct is depicted in fig. 2.

A very useful test for the presence of brucine is to add to the substance in strong alcohol a little methyl iodide, whereupon groups of rosetted needle-tufts of methyl brucine iodide will occur. Effects of like formation result when an alcoholic solution of iodine (or else hydriodic acid with iodine) is used on an alcoholic solution of brucine. Should strychnine be present in the alcohol it does not at all interfere with the result. In a solution of brucine acetate treated with ammonia minute needle-crystals are precipitated. It should be pointed out that *excess* ammonia fails to yield a precipitate in solutions of brucine, whereas a precipitate occurs when such an excess operates on solutions of strychnine.

Both the carbonated and caustic alkalies precipitate brucine from its solutions. Neither chromate nor dichromate of potassium gives a precipitate in solutions of the neutral salts of brucine, but they give precipitates in solutions of the corresponding salts of strychnine. Precipitates of brucine are generally yolk-yellow in colour. Brucine neutralises acids, and forms a series of salts, most of which are crystalline. The acetate is, however, non-crystalline, although strychnine acetate *does* yield crystals. This behaviour gives another guide for the identification of brucine.

An important series of tests are the following, which are generally used to confirm the preceding ones. The moment nitric acid contacts with brucine-powder the latter becomes an intense scarlet colour, which changes to blood-red, yellow-red, and then to yellow. If a drop of water containing some semi-dissolved granules of brucine be touched with a little nitric acid the solution will become yellow, and transparent rectangular prisms and tablets, often grouped together in rosettes, will quickly rise, as shown in fig. 3. Later on the usual red colour will be manifested. It has already been mentioned that oxalic acid and kakotelin result from the nitric-acid test. These reactions can be best studied by placing the brucine in a test-tube, and adding nitric acid of specific gravity 1.4 to it. It is advisable to stand the tube in cold water meantime. The characteristic red colour will reveal itself, and, at the same time, nitric oxide, carbon dioxide, methyl nitrite, oxalic acid, and kakotelin will occur. Dilute the solution abundantly with water, whereupon fluffy yellow specks of kakotelin will separate. These are insoluble in water, but are soluble in dilute acids, and are best crystallised out of dilute hydrochloric acid or dilute nitric acid.

After the separation of the kakotelin the remainder should be neutralised with ammonia, and then calcium chloride added to throw down the acid as a calcic oxalate.



No. 3. — Magnified transparent crystals obtained from a nitrated solution of brucine. The actual diameter of the disc was about one-twenty-fourth inch.

No. 4.—Upon greatly magnifying partly melted brucine, multitudes of minute prisms will be found in it. The above disc was in actual diameter about one-twenty-fourth inch.

Another test is to add nitric acid to an aqueous solution of mercurous nitrate, and then add this compound to the solution of brucine salt, and warm all. A beautiful carmine tint will occur.

Solutions of brucine are coloured red by chlorine, which can be changed to yellow by means of ammonia.

The Docks of London.

This account of the work that goes on in discharging and loading ships is contributed by a pharmacist who is en route to the Government Laboratories. He describes the initial stage, in which service as a junior Customs officer makes him familiar with the goods which are dutiable on importation.



A DOCK SCENE.

THE Customs and Excise Service (as depicted by coaching establishments) came under my notice when in a summer berth in a seaside pharmacy. I made up my mind to try for it. Some months' study after business hours, a competitive examination, a weary wait, and July of a few years ago found me reporting myself at the headquarters of the Customs Service, Custom House, London. It took but a few minutes for me to realise that I was a mere unit, and an insignificant one at that, in a great organisation. Particulars of myself were entered in a mighty tome, and my immediate duties were decided upon. A letter of introduction to the Surveyor, Victoria Dock, E., was handed me, and I was directed how to reach that not too salubrious quarter of London.

The London of the average visitor is almost invariably restricted to a square mile with Charing Cross as its centre. Occasionally he will get as far as gazing from London Bridge at the shipping in the Pool. Should his curiosity tempt him to get to closer quarters he finds himself in Billingsgate and promptly retreats. But the Londoner ought to be ashamed of his ignorance of dockland. With perfect safety it can be said that, apart from those whose business takes them there, not one Londoner in a hundred has visited the Docks. In twelve months at Victoria Dock I only once saw one person who was unmistakably a visitor.

THE PORT OF LONDON

stretches from Tilbury westwards right up the river, and for convenience in Customs work it is divided into districts, usually a single dock or a group of riverside wharves, each under a surveyor. These districts are subdivided into "stations" which are in charge of one or more officers, according to the volume of work involved. It was to an outdoor landing station that I was first sent. "Landing" signifies that the vessels discharge their cargoes, but do not load. It is customary with large lines to discharge and load at different quays, sometimes in different docks, in order to avoid confusion between the import and export cargoes.

When a ship "from foreign" enters a British port and has been passed by the medical officer, the first duty of the master of the vessel is to lodge at the Custom House, within twenty-four hours of arrival, a detailed report, giving a description of all the cargo on board, where it was shipped, and to whom consigned. The merchant owning the goods has also, if they are not liable to duty, to pass a "free entry" for them—i.e., he states upon a form particulars of the goods, their weight, and value. A copy of the ship's report and all the entries for that ship as they are passed at the Custom House are sent to the station at which the ship is discharging. The officer records upon the entry the result of his examination of the goods and compares it with the report. Every item upon the report must be accounted for.

It was chiefly in assisting the officer at the station to check these entries against the report that my first duties consisted. A report may be anything from one to forty or more foolscap sheets, and the entries often run into some hundreds. The station was a wide one, and vessels came from all parts. Commercial geography was quickly learnt on a new and improved method. Incidentally one's

vocabulary was also extended. I well remember inquiring what "casings" were, and was promptly informed by an Irishman with a broad accent, "Shape's guts." On this particular station in point of numbers, if not of interest, New Zealand vessels took first place. It was the regular berth of the largest ships on the "run," and I soon became heartily sick of seeing frozen mutton. A single vessel will bring 100,000 carcasses, which are invariably carried in the holds for'ard; these alone being fitted with refrigerating-apparatus. Thirty or forty carcasses are slung out of the hold, lowered to the quay, and passed by travelling belts to railway-trucks or to the refrigerating-stores on the dock. In London much work is by lighters, and quantities of cargo are lowered into lighters lying alongside. These take the goods to up-river warehouses, where the ships cannot go. It is curious to see men working in the holds on a hot summer's day with sacking round their feet and legs to avoid frost-bite. New Zealand cargoes are monotonously alike. During summer the work is increasingly frozen meat, mainly mutton, with some hemp, wool, and tallow. With winter, however, comes a change. Meat gives place to butter and cheese, and a vessel with 60,000 $\frac{1}{2}$ -cwt. boxes of butter and half that number of crates, each containing two cheeses, is quite common in January. Speaking generally, the frozen meat is in excellent condition, and the butter and cheese of the best. I have seen at least five million carcasses of mutton, and do not recollect a single case of New Zealand meat being condemned by the Public Health authorities. The importation of pork is only permitted subject to special examination by the meat-inspector, and the heads must still be on all carcasses. The butter is constantly sampled under the Sale of Food and Drugs Acts, and goes to the Government Laboratory for test.

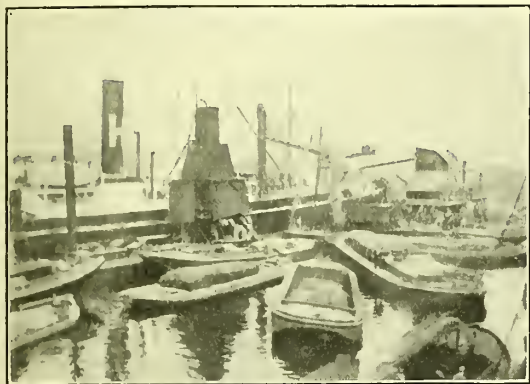
To the chemist New Zealand cargoes are uninteresting. The only things I saw which could be described as pharmaceutical were two consignments of ambergris. The first was in a small, carefully sealed package, and contained a number of pieces resembling slightly blackened pumice, about the size of a man's fist, some smaller pieces being in a mustard-tin. It was valued at some hundreds of pounds. The second lot a passenger brought over. In quantity it was much larger than the former, but there was considerable doubt as to its being genuine. As for its value, the estimates varied from 1,000*l.* to nothing.

CARGOES OF DRUGS AND OTHER PRODUCE.

The pharmacist will find the ships from the East of chief interest. P. & O., Nippon Yusen, and Hall Lines usually bring cargoes containing at least a few parcels of drugs. Under normal conditions the P. & O. discharge either in the Royal Albert Dock or at Tilbury, and I did not see much of them. The Nippon Yusen are invariably good for some drugs. Touching at almost every port of consequence from Kōbe westwards, they are most interesting. Those in London would do well to watch the shipping news for the arrival of these ships. Their names, consisting of two words, one of which is "Maru," are easily distinguished: for example, "Aki Maru." Under peace conditions they arrive fortnightly on Thursdays, and a visit to their berth at Victoria Dock on the following Saturday or Monday is rewarded by the sight of a wealth of miscellaneous cargo. If you keep out of the way on the quays and ask permission before going through the sheds, no one will interfere with you. Cases of potassium iodide and camphor from Japan, and ingots of tin and copper from the Straits Settlements, are in every ship. Marseilles sends

quantities of aluminium, done up in bundles of small ingots, herbs, and castor, olive, and coconut oils.

The Hall Line is more irregular, but its ships are quite as interesting. Coming from the Malabar Coast *via* Marseilles, they bring quantities of nux vomica. A thousand sacks is nothing unusual. The sacks are often torn, and the seeds lie thick upon the warehouse floor. Gentian, in larger sacks, is often in quantities up to forty or fifty tons, while liquorice and aconite are similarly packed. Liquorice-root usually reaches the consignee short weight, for the dock labourer likes to take a stick home for the youngsters, and does not wait to ask permission. Indeed, his light-handedness is sufficiently important for boots to be exported with the "rights" in one case and the "lefts" in another, to lessen the temptation to pilfer. It was one of these boats which had discharged a cargo of coir yarn, fibre, nux vomica, and a quantity of shelled filberts and almonds. These were all stored in a shed with a policeman in charge. Imagine my surprise on passing down the shed to find him chewing nux vomica seeds. He explained that he had tried the other nuts and so thought these might be all right, but found them too hard. I took some delight in telling him that strychnine was obtained from them, and it was a distinctly pale "copper" I left in that shed. Turmeric is not so common, but I have seen some magnificent samples of split bulb-turmeric from the Malabar Coast. Rhubarb



DISCHARGING GRAIN.

The pyramidal apparatus in the centre of the picture sucks the grain from the hold of the steamer and pours it out into the lighters.

is plentiful; sandalwood comes both in chips and blocks bound together by straw braid, while occasionally one sees a quantity of cinnamon oil imported in old whisky-bottles.

The British India Company's vessels also discharge on the south side of Victoria Dock, and, if lucky, you may see a few live animals being landed, in most cases consigned to the Zoo. The smaller ones in cages present no difficulties, but an elephant can be most awkward if there is no native manhood to manage it. On one occasion three live kangaroos were reported by an Australian ship. Only two were "entered," and my inquiry as to the whereabouts of the third of the trio elicited, not the usual reply of "short shipped," but "died *en route* and thrown overboard." Quails are not a very common importation, but a Burmah boat which had called at Alexandria brought 76,000 live quails. These were in shallow trays, built one above the other, forming chests about ten storeys deep. The average floor-space per bird was about 4 in. square. They were very like young thrushes, and chattered incessantly. While noisy enough for volume of sound, they had to give place to 2,000 parrots of every variety, from small paraquets herded together to large green ones enjoying the privilege of private cages. These had come from Australia, and were consigned to a dealer in Hamburg. They remained for some days in the sheds while awaiting the Continental ship.

GRAIN IMPORTATIONS

in London are practically confined to the Victoria and Millwall Docks. Both of these docks have facilities for dealing with grain "in bulk," as it is called when loose in the ship's hold, and it is in this way that by far the greatest proportion arrives. Two forms of hoist are in common use. The older is an adaptation of the dredger, and consists of a series of small buckets, which empty upon a travelling belt. The modern method depends upon suction only. Both patterns automatically weigh the grain and discharge it, either into the flour-mills direct or into barges. The photograph shows the suction type in the foreground, with the older pattern further back. Both are upon floating platforms, and are discharging into barges alongside. Dust arises in clouds from the dredger form, the men in the holds being obliged to wear some kind of respirator—often the crude one of a piece of damp cloth. The suction-plant is practically dustless in action.

THE POPULAR CONCEPTION OF A CUSTOMS OFFICER

is very erroneous. The examination of passengers' baggage and the searching of vessels is the duty of the Waterguard—a separate service recruited in an entirely different manner. The Customs officer and the Excise officer who examines your methylated-spirit requisite-book are one and the same person. The Waterguard or Preventive staff board a ship before it reaches its berth, and while the Preventive officer secures under seal all the ship's dutiable stores which remain over, the Preventive men—usually four in number, and known as a rummaging crew—search all likely places for contraband. Bunkers, ventilators, and the ship's boats are favourite places. The crew prefer to hide their tobacco on the open deck or in some public place, as it is then merely confiscated if no one comes forward to own it; while if it is found in a man's berth he is personally held responsible and fined. Rummaging is always a battle of wits, but the Waterguard includes some smart men, and very little escapes their eyes. Those pharmacists who travel abroad should bear in mind that the right to bring back small quantities of tobacco, spirits, etc., duty-free is subject to their declaring what they have, however small that quantity may be. It is for the officer, not the passenger, to decide whether duty is to be charged or not.

The examination of cargo is upon a percentage basis, roughly 10 per cent. being examined, but at least one package however small the number of each description of goods. For ships from Continental ports this proportion is doubled. Cases must always be opened, but bales of wool, fibre, or straw-braid, casks of tallow, and bags of grain, etc., are spitted with various forms of spit designed to suit the particular class of goods. When the admixture of free and dutiable substances is suspected a sample is sent for analysis. A simple instance of this is the testing of glue and gelatin for added sugar.

DUTIABLE GOODS

are of greater importance from the Customs point of view. They are roughly divided into two classes—high and low duty goods. The former comprise spirits, saccharin, tobacco, and tea, while the latter include wines, sugar, glucose, dried fruits, and similar articles or substances containing them. The popular fallacy still exists in a most amazing way that lace is dutiable, although it has been free for half a century. Tobacco almost invariably passes through a bonded warehouse. It is weighed net on being received into the warehouse, and again weighed for duty when the merchant wishes to pay duty and remove it. This second weighing is only done if the merchant requests it. Usually he does so, as tobacco becomes dryer in warehouse in many cases, and he most strongly objects to paying 3s. 9d. per lb. for moisture which has evaporated. Spirits are dealt with according to their strength in proof degrees. Proof is about 57 per cent. of alcohol by volume, and spirituous preparations are designated by degrees u/p or o/p, according as they are under or over proof. A glance at a S.V.R. permit shows that it is 58 o/p. With plain spirit the strength is readily obtained by the hydrometer, but in

cases where the preparation contains sugar or some other substance in solution—e.g., rum—a sample is sent to the laboratory for test and estimation of the "obscuration"—i.e., the number of degrees by which the correct reading of the hydrometer is obscured. Tea is weighed net in cases, or if the packages are of a very even character the gross weight is taken and an average tare allowed. The duty upon sugar depends upon its degree of purity as shown by its "rotation," or polariscope value. For most things there is a fixed rate of duty, but when in doubt the laboratory has to decide.

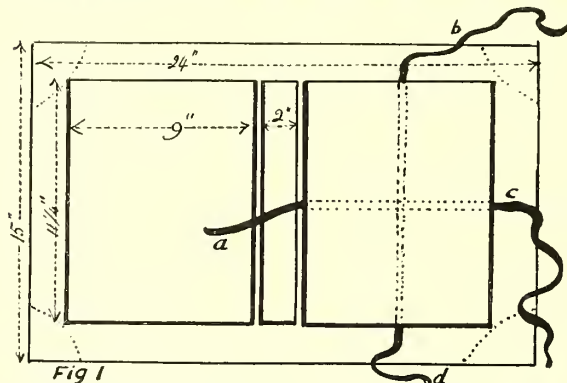
For the revenue exportation is not of great importance. Here it is only necessary to safeguard the Crown against fictitious claims for drawback. All substances upon which Customs or Excise duty has been paid are, upon exportation, subject to the repayment of the duty, together, in the case of beer or spirits upon which Excise duty has been paid, with a slight amount (3d. per gal. for spirits) to recomp the trader for the extra expense which he has incurred owing to Excise supervision. The Customs officer must see that the goods exported are what they are stated to be, and that they are actually placed on board and over-stowed. Loading often goes on night and day, and I have paced a ship's deck all night waiting to see a few cases of spirits shipped. This may help to eradicate that persistent idea that every Civil Service berth is an inordinately soft one. I have done as hard a day's work in the Service as ever I did in a pharmacy. The greatest difference is that an eight-hour day is the maximum. There is no waiting for that bogey the last customer.

Filing the "C. & D."

By J. Grantley Tingle, Toowoomba, Queensland.

THE method of filing back volumes of THE CHEMIST AND DRUGGIST described in this note has probably been employed by others—perhaps by many others. I do not remember to have seen it in use or in literature; but there is nothing new under the sun, and none of us has a monopoly of ideas.

The fifty-two numbers of the year are divided into two volumes, and, since only the literary pages have been filed, the wires are drawn out of each number and the

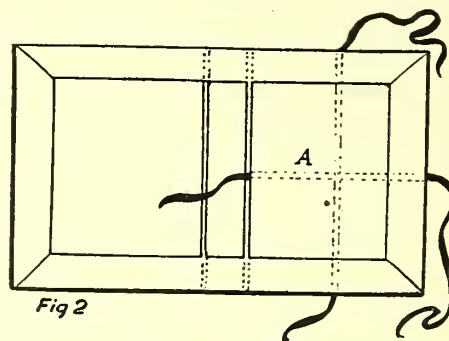


advertisements removed as far as is possible without tearing any of the folded sheets. If it be desired to file the journal as a whole, the volumes probably would be too unwieldy for satisfactory treatment by this method.

For the side covers of each volume two pieces of cardboard are required of the dimensions $11\frac{1}{4}$ in. by 9 in., and for the back a strip $11\frac{1}{4}$ in. by $1\frac{3}{4}$ or 2 in. I have, so far, used old showcards as sources of this material. There must be also provided a piece of black sateen, 15 in. by 24 in., and two lengths of $\frac{1}{2}$ -in. black tape, one 30 in. and one 39 in. in length. The sateen I have used is obtainable (for about 8d. a yard in Queensland) with a width of 30 in., so that 2 yards provides material for six covers. Further, a sufficiency of thin but good hot glue must be made ready.

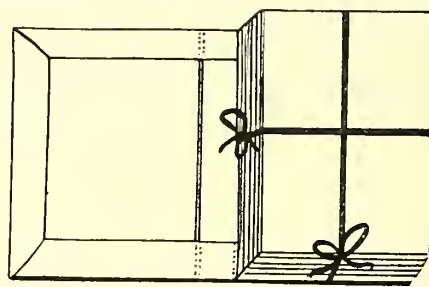
The black tapes are first glued to one of the side covers

so that they cross one another at right angles at the middle of the cover, the shorter tape being affixed along the 9-in. length, and the longer tape along the middle of the $11\frac{1}{4}$ -in. length. Also the tapes are arranged with their free ends of unequal length; the shorter tape has



one free end about 7 in. long, and the other (as a matter of course) will be about 14 in. long. The longer tape, which crosses that, has one free end 6 in. long, and the other is 22 in. in length. These free ends are to be used to tie down the collected twenty-six numbers of the volume to the back cover.

Glue is now rapidly and evenly spread over one side of each of the three cardboards (including that side of the back cover to which the tapes are already fixed), and they are laid down and pressed on to the sateen in their relative positions, as shown in fig. 1. It is perhaps hardly necessary to point out that interspaces, to admit of folding the cover, must be left between the back strip and each of the side covers. Thus tape (a) is 7 in. long, (b) 22 in., (c) 14 in., and (d) 6 in. The three outer tapes (b, c, d) are now passed through slits in the sateen made close to the edges of



the cardboard, and the sateen is turned over and glued down to the inside of the covers. The four corners of the material are cut out along the dotted lines so as to permit of a neat finish where the folding-over of the top and bottom meets the sides.

The covers so far advanced are shown in fig. 2.

The twenty-six numbers for the volume (minus the advertisements) are now laid in order on a and tied in position with the tapes (see fig. 3).

For lettering the back I use the title from the outside cover of any of the numbers of the weekly, arranged as shown below and "seccotined" on to the sateen. At the bottom is affixed a shield of Z.O. plaster, with the volume number and date, as also indicated.

In this way, with a small expenditure of money and time—I generally do two volumes together in part of an afternoon—the volumes are filed away in a form readily accessible and almost as easy for reference as a bound book.

It is important not to tie up each index with its volume, but to keep them all together in a separate cover similarly constructed. References can then be looked up rapidly through a long series of volumes without the necessity of handling each one, and often perhaps unnecessarily.

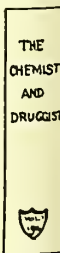


Fig 4

Inventions which have Become Public Property.

EVERY year there expire a considerable number of monopolies granted to inventors under letters patent, and as a rule the public is none the wiser. One consequence of this lack of knowledge of public rights is that the monopoly practically continues after the patent has expired; moreover, the inventor may acquire fresh rights which might hamper the public in the exercise of its rights. From the inventor's point of view it might be argued that he has fulfilled the purpose of the Patent Acts in introducing a new industry into the country, and that he has also paid to the Patent Office a considerable sum in fees during the fourteen years that his patent lasted. The answer to this is that a definite bargain was entered into by the State, and that the yield from a protected invention should be very much larger than could have been obtained otherwise. In many cases, moreover, there is reason to believe that no new industry was introduced into this country, and thus the inventor's side of the contract was never fulfilled. It happens that in the drug-trade a large number of patents are obtained annually for new chemicals which become proprietary in character and bring within their train onerous obligations which worry alike the wholesale druggist and the dispensing chemist. Perhaps if the public rights were better understood the inconveniences could be minimised, especially on the termination of the patent monopoly.

The question of registered trade-marks is closely interwoven with that of patent monopolies, but the only aspect of that question which concerns us now is when the name of the patented article is also registered as a trade-mark. There are reasons why this is done, the more frequent being that it may be more convenient to train an infringement of a trade-mark, even while the patent is in force, as this would not raise the greater question of the validity of the patent. On the other hand, the intention in some cases is undoubtedly to leave to the inventor the means to obtain by this means an extension of the patent monopoly. When it is understood that a trade-mark, by renewal every fourteen years, can be continued indefinitely, and that renewals of the trade-marks applied to patented articles are made after the expiry of the patent, the extent of the continuance of the monopoly will be realised. In this connection it is *propos* to quote the remarks made before the Eleventh International Congress of Pharmacy by Mr. Edmund White, President of the Pharmaceutical Society, who is intimately connected with the manufacture of fine chemicals:

When the name of a substance prepared by a patented process is a registered trade-mark, exclusive right in that trade-mark ceases on the expiration of the patent, thus:

Where an article has been introduced as new and has been first manufactured under a patent, the name by which it is known becomes public property as soon as the expiration of patent-rights puts an end to the monopoly in manufacture and sale of the article." (*Kerly on Trade-Marks*.)

Where a patentee attaches a particular name to the product he patents, that name becomes common property the name of the patented article. It possesses, indeed, another name. (Lord Herschell in *Reddaway v. Barham*.) Consequently (in the Vaseline case) it was held that the *Linoleum Co. v. Nairn* decided that when the inventor of a new substance gives it a name, and, having taken out a patent for the invention, has, during the continuance of the patent, alone made and sold the substance by that name, he is not entitled to the exclusive use of that name after the expiration of this patent.

In the Vaseline case, however, it was proved that no patent had been taken out in England for the manufacture of the substance which (when manufactured by himself) the inventor named "Vaseline." Accordingly it was directed that the trade-mark "Vaseline" should remain upon the Register.

In the *Magnolia Metal* case, Lord Justice Rigby said: "The manufacturer or patentee cannot by any means entitle himself to a monopoly in the use, after the secret process has been discovered or the term of the patent has expired, of the name by which the manufactured article is exclusively known while the secret is undiscovered or the term of the patent is unexpired."

The reason why, in the following notes, we have associated registered trade-marks and the expired patents to which they refer is thus apparent. At the same time it must be borne in mind that while the trade-marks remain on the Register, there is the risk of legal proceedings in using the mark, and it may only be added that the cost of defending legal actions has before now resulted in the loss of public rights. During the continuance of the war such registered trade-marks as belong to alien enemies can be avoided by the comparatively simple and economical procedure provided by the Patents, Designs, and Trade-marks (Temporary Rules) Act, 1914. It is for those interested to consider whether concerted action should not be taken to purge the Register and, incidentally, to minimise one of the evils from which the drug-trade is suffering.

In the following notes we give a selection of recently expired patents which are of particular interest at the present time when attention is directed to promoting the manufacture of fine chemicals in this country.

Acoine.

Di-para-anisyl-mono-phenethylguanidine hydrochloride. Employed as a local anæsthetic dissolved in water or oil.

TRADE-MARK: No. 210294 registered in 1898 by the *Chemische Fabrik von Heyden G.m.b.H.*, Radebeul, near Dresden, Germany. Registration renewed 1911.

PATENT: No. 24287 of 1897, "Production of oxyphenyl-guanidines and their derivatives," granted to above-named company. The patent became void in the eighth year. The specification is a very long one, and refers to a new class of oxyphenyl-guanidines "characterised by the powerful anæsthetic action." The process of manufacture is carried out by the following methods:-

(1) The reaction-products of carbon bisulphide and amidophenol ethers, such as thio-carbamates, thio-ureas, and the like, are treated with desulphurising-agents, such as PbO , HgCl_2 , etc., and an amidophenol or ether thereof. The intermediate carbo-diimide—for example, carbo-diphenetyl diimide, $\text{C}(=\text{NC}_6\text{H}_4\text{OC}_2\text{H}_5)_2$ —may be first isolated as white crystals by adding lead oxide to a solution of diphenetyl thio-urea in benzene, and then passing in gaseous hydrochloric acid. (2) Copper powder is used as desulphurising-agent, and the amidophenol or its ether is omitted. (3) The reaction-products of carbon bisulphide and amidophenols and their ethers are heated alone to 150° or 200° C. (4) The ureas corresponding to the foregoing thio-ureas are heated with dehydrating-agents, such as caustic alkalis and alkali alcoholates. A large number of new guanidines produced by these methods are mentioned, of which the following are examples—viz., *o*- and *p*-triphenetyl-guanidine and their homologues, triphenyl-guanidine, diphenyl-monoanisyl-guanidine, and dianisyl-mono-phenol-guanidine.

Airol.

Bismuth oxyiodogallate. Used as a substitute for iodiform.

TRADE-MARK: No. 181257, registered in 1894 by *Hoffmann, Taub & Co.*, *Chemische Fabrik*, Basel, Switzerland. Registration renewed 1908 by *F. Hoffmann-La Roche & Co.*, successors to *Hoffmann, Taub & Co.*

PATENTS: No. 22902 of 1894, "Bismuth oxyiodide gallate," granted to *Dr. Fritz Lüdy*, Basel. The German

patents are 80399 (21/6/94) and 82592 (26/1/95). The United States patent is 544104 (1895).

The examples of the methods of manufacture given in the patent-specification are as follows:

1. Bismuth oxyiodide separated in the known manner from 9.5 kilos. of crystallised bismuth nitrate, is well washed, and while moist is stirred together with water; 3.4 kilos. of gallic acid is added, and the mixture heated in a water-bath until the red colour has been completely changed to dark greyish-green. The precipitate is collected, washed, and then dried at a moderate heat.

2. Ten kilos. of bismuth gallate (dermatol) is treated under heating with 3.1 kilos. of hydrogen iodide until the yellow colour has been entirely converted into a greyish green. It is then washed, and dried at a moderate heat.

Alumnole.

Aluminium naphthol-sulphonate. An astringent and mild antiseptic.

TRADE-MARK: No. 215948, registered in 1899—"No claim for alum"—by the Farbwerke vormals Meister, Lucius & Brüning, Höchst a/Main, Germany. Registration renewed 1912.

PATENTS: No. 10668 of 1892, "Manufacture of alumina salts of naphthol-sulphonic acids," granted to above-named company. The German patent 74209 (14/5/92) bears the title "Verfahren zur Darstellung der Thonerdesalze der Naphtholsulfosäuren genannt Alumnole."

The following is the method given in the patent-specification for the production of the alumina salt of β -naphthol disulphonic acid R:

Fifteen parts by weight of β -naphthol disulphonate of sodium R of 69-per-cent. is dissolved in 60 parts by weight of boiling water, and, while being kept continually stirred, is mixed with a hot concentrated solution of 7 parts by weight of commercial chloride of barium in crystals. In this operation the barium salt of the acid R precipitates in gelatinous form, which, however, after further stirring passes over into a well-washable form. It is cooled by means of ice, and sucked off. The barium salt, well washed and freed from the chloride of barium, is transformed by means of the requisite quantity of sulphate of alumina. To effect this the barium salt is suspended in 40 parts by weight of boiling water, and mixed with the requisite quantity of sulphate of alumina in hot concentrated solution. The liquid is filtered off from the sulphate of barium, and the filtrate concentrated. In this operation the alumina salt ["alumol" in the provisional specification] separates in the form of white crusts, which are dried and ground. The alumina-compound or alumol thus obtained is in the form of a white powder of astringent taste and easy solubility in water.

Argentamin.

Ethylene-diamine silver nitrate. Antiseptic and astringent.

TRADE-MARK: No. 216096, registered in 1899 by the Chemische Fabrik auf Actien vormals E. Schering, Berlin. Registration renewed in 1912.

PATENTS: No. 8429 of 1893, "Improvements in the manufacture of antiseptics," and 10845 of 1900, granted to above-named company. The patent became void in the seventh year. The German patent 74634 (25/4/93), corresponding to British patent 8429/93, is entitled "Verfahren zur Herstellung Alkalischer eiweiss nicht coagulirender, antiseptischer Flüssigkeiten."

The manufacture of alkaline silver-salt solutions which do not coagulate with albumen is thus described in the first British patent:

Ten parts of phosphate of silver is gradually stirred with 10 parts of basic ethylenediamine dissolved in 100 parts of water.

The second British patent referred to above describes the process of obtaining solid silver nitrate-ethylene-diamine. The process consists in drying the crystalline jelly produced, by suction, washing with alcohol and ether, and drying over lime in the dark.

Argonin.

Silver casein.

TRADE-MARK: No. 183707, registered in 1895 by Farbwerke vormals Meister, Lucius & Brüning, Höchst a/Main, Germany. Registration renewed in 1908.

PATENTS: No. 22191 of 1894, "Manufacture of a

new solid silver compound which is not precipitated by albumen or salt," granted to above-named company. The patent became void in the seventh year. The corresponding patents in other countries are: United States, 575277 (1897); France, 242933 (1894); and Germany, 82951 (1894).

The following examples of the method of manufacture are given in the British patent-specification:

1. Three kilos. of sodium salt of casein containing no free alkali is mixed with 300 grams of nitrate of silver, and the mixture dissolved in water by the aid of heat. If this solution be precipitated by alcohol, or cautiously evaporated *in vacuo*, after drying the precipitate produced by alcohol, or after powdering the residue of the evaporation *in vacuo*, a white substance is obtained which is soluble in water with reaction neutral to litmus.

2. A mixture of 1 gram of silver nitrate and 10 grams of casein sodium phosphate (3 grams of casein, 2.6 c.c. of normal solution of disodic phosphate) dissolves in 200 c.c. of water, forming a solution which exhibits the above characteristic properties in regard to albumen and salt.

Aristochin.

Diquinine carbonic ester or carbonyl quinine. Medicinal properties, as quinine, but tasteless.

TRADE-MARK: No. 238180, registered in 1901 by the Farbenfabriken vormals Friedrich Bayer & Co., Elberfeld, Germany. ("No claim for Aristo.")

PATENTS: No. 16564, of 1898, granted to the Vereinigte Chininfabriken Zimmer & Co. G.m.b.H., Frankfurt a/Main, Germany. The corresponding patent in the United States is 625075 (1899), and in Germany 105666 (22/7/98).

The example given in the British patent-specification is as follows:

One kilo. of anhydrous quinine is dissolved in 4 kilos. of chloroform, 76.4 grams of phosgene gas being passed into the cooled solution. The product of the reaction remains liquid, because quinine hydrochloride produced by the reaction is also readily soluble in chloroform. In order to remove this substance, together with small quantities of quinine remaining unchanged, the product of the reaction is agitated with water containing 1 per cent. acetic acid until the extracts no longer taste bitter. The diquinine carbonic ether is then removed from the chloroform solution by agitation with water containing 1 per cent. sulphuric acid, small quantities of the chlorocarbonic ether of quinine which is almost always produced, remaining in the chloroform. The new compound can be isolated from the sulphuric-acid solution by treatment with alkalis and agitation with ether, which is then evaporated or allowed to stand, depositing the substance in the form of white crystalline crusts, which may be purified by recrystallisation from alcohol or benzene.

Aristol.

Di-thymol iodide.

TRADE-MARK: No. 93538, registered in 1890 by the Farbenfabriken vormals Friedrich Bayer & Co., Elberfeld, Germany, for "a new pharmaceutical product." Registration renewed 1903.

PATENTS: No. 5079 of 1889, "New or improved manufacture of periodides of phenols and salicylic acid," granted to above-named company. The corresponding patent in the United States is 446875 (1891), and in Germany 49739 (1889).

The specification of the British patent gives the following process for the production of iodo-thymol-iodide:

1.5 kilos. of thymol is dissolved in 10 litres of water with the addition of 0.8 kilo. of caustic soda, and to the clear liquid a solution of 5.08 kilos. of iodine in 6.5 kilos. of an alkaline iodide is added, the liquid being stirred without heating. A dark-red voluminous amorphous deposit or precipitate is immediately formed, which consists of iodo-thymol-iodide. The product is immediately separated by filtration, and the collected iodide is carefully washed with clear water and dried at the ordinary or atmospheric temperature.

In the European patent 18021 of 1890 reference is made to the above patent and to the iodine derivative, thymol, "which has already become an important article of manufacture known as aristol."

Benzosol or Phthiosol.

Guaiaicol benzoate. Used in incipient phthisis, and as an intestinal antiseptic.

TRADE-MARKS: "Benzosol," 97425 (1890), "Phthiosot," 97426 (1890), registered by the Farbwerke vormals Meister, Lucius & Brüning, Höchst a/Main.

PATENTS: No. 5366 of 1890, "Production of guaiacol ether," granted to above-named company. Corresponding patent in United States 453035 (1891).

The following is quoted from the British specification:

This ether, which for medical purposes may be named "phthiosot" or "benzosol," is prepared in the following manner: The crude guaiacol, having a boiling-point from 200° to 205° C., as it is obtained by fractional distillation from wood-tar, is converted into its salt, preferably its potassium salt, which is purified by recrystallisation from alcohol. The salt obtained in a pure state is heated with a suitable proportion of benzoyl chloride or benzoic anhydride, and the benzoyl compound thus formed is recrystallised from alcohol.

Chinaphenin.

Phenetidin-quinine carbonic-acid ester.

TRADE-MARK: No. 252442, registered in 1903 by the Vereinigte Chininfabriken Zimmer & Co. G.m.b.H., Frankfurt a/Main, Germany.

PATENT: No. 22285 of 1899 "Manufacture and production of new derivatives of quinine carbonic acid" granted to the above-named company. Corresponding patents, in United States 637839 (1899), in Germany 109259 (28/2/99).

The British patent-specification gives the following among the examples of the methods of manufacture.

Phenetidide of quinine carbonic acid (p-ethoxyphenyl-carbamio ether of quinine).

A solution of p-ethoxyphenylcarbamio chloride in benzene is first prepared by adding the molecular proportion of phosgene dissolved in benzene to a well-cooled solution of two molecular proportions of phenetidine in benzene. P-ethoxyphenylcarbamio chloride is produced, and remains dissolved while phenetidine hydrochloride is precipitated. This is filtered, and to the filtrate is added two molecular portions of quinine, which dissolves on warming. The quinine hydrochloride separates on cooling, and is removed by filtration. The filtrate is agitated first with water, and then with dilute acid—e.g., sulphuric acid—which takes up the phenetidine. It can be precipitated from the acid solution by ammonia.

The salicylate of this salt is very readily soluble in ether—a distinguishing test from euquinine.

Chloralamide or Chloralformamide.

Hypnotic, like chloral hydrate, "does not affect the action of the heart nor disturb the digestion."

PATENTS: No. 7391 of 1889, "A process for the production of a substance to be called chloralformamide or chloralamide," granted to Joseph Friedrich von Mering, Strassburg. Corresponding patents are Belgian 86090 (1889), United States 425039 and 425040, German 50536.

The specification of the British patent states that "for the sake of brevity [the product] is called chloralamide."

It is obtained by the action of chloral (C_2HCl_3O) on formamide ($CHONH_2$) in the ratio of their molecular weights. The mixture becomes warmed, and gradually thickens until it becomes a solid crystalline mass consisting of the new combination—viz., chloralformamide.

Creosotal

Creosote carbonate. Substitute for creosote.

TRADE-MARK: No. 216421, registered in 1899 by the Chemische Fabrik von Heyden G.m.b.H., Radebeul, near Dresden, Germany. ("No claim for creosote.") Registration renewed 1912.

PATENTS: 19074 of 1890, "Improvements in the manufacture and production of medicinal compounds from ethereal oils," granted to Dr. F. von Heyden Nachfolger. The corresponding patents in other countries are: United States 501235 (1893), Belgium 94068 (1891), Italy Vol. XXXIX., No. 99 (1891), Germany 60716 (1891).

The specification names the ester carbonates of menthol, d. and l.-borneol, guaiacol, creosol, eugenol, carvacrol, and gaultheria oil, and the ester carbamates or carbaminates of menthol, d. and l.-borneol, carvacrol, guaiacol, creosol, eugenol, thymol, and geraniol. Examples of the methods of preparation are given.



The Black Draught.

From the engraving by H. Dawe of M. W. Sharp's picture.
(Lent by Mr. D. Maskew, Clacton-on-Sea.)

Evolution of the Pharmacist.

(Illustrated by Mr. Granville Shaw, Ph.C.)

IV.

With the Tudors on the throne, one could wander all alone
In the alleyways of Science, unafraid;

So in Bucklersbury's
marts I sold
spicery for tarts,
And physic for
the Queen or
kitchenmaid;

Drug and herb were
mine by right,
but the watches
of the night

Were spent with
beaker search-
ing Galen's
store;

For my knowledge,
though but
spare, might
prove useful at
the Square

In about three
hundred after-
years—or more.

Thus the skill of
craft advanced,
thus was Phar-
macy enhanced

By the learned Tudor alchemist and scribe,
And the feeble vestal flame (now a bonfire, some will claim)
Flickered stronger, spite of ribald jest and gibe.

So I wrestled in my pride with the learning deep and wide
That fore-ordained the futurist "B.P.;"

And not even was I deaf to a clamour for "P.F."
Or the "Extra-Pharm." that was about to be.



A PYRENEAN LEGEND.—There is an interesting little Pyrenean legend of the discovery, at the foot of the Pyrenean Mountains, of the famous brine-springs of Briscous, to which Biarritz owes its popularity as a spa, by the hunters of a famous wild white boar, which eventually proved to be a black boar covered over with the crystals of the white salt. Thus the salt springs came to be known.

Trade Growls.

Customers.

"WHAT is there to be written regarding customers?" a chemist may ask himself. No doubt his chief concern is to get new ones, and after getting them to retain them. Nevertheless a great deal may be learned and turned to useful account by observing the manners and requirements of customers in various places. Can it be said that the lady who shops in the stores acts in precisely the same way when she makes a purchase from a small shopkeeper? One who has had the privilege of being employed in a private shop and afterwards in a large store in the same neighbourhood may be allowed to express an opinion on such a question, and the answer would be in most cases a decided negative. If the assistant employed by a private chemist has a youthful appearance, the dialogue between the lady and the assistant may be as follows:

"Good afternoon. Is Mr. Blank in?"

"Yes, madam. I shall get him for you."

When Mr. Blank comes in the lady greets him with a patronising air.

"Good afternoon. I have such a headache. Would you make me up something to relieve it?"

"Certainly, madam. Kindly be seated for one moment and I shall mix you up a little powder."

After she has taken the medicine she remarks, "Will you put it to my account?"

The chemist is delighted, and running to the door opens it for her and bows her out. He then goes and makes a charge, 2d. to account. Now what happens in a store? The same lady may, of course, suffer from a headache there, but she acts differently. The assistant there may seem to her to be a youth, but she does not ask for the buyer. In the first place because he does not know who she may be, and, secondly, she gets precisely the same treatment from him as from any of the salesmen. She goes to the drug-department and asks for one dozen headache powders; she takes one and the remainder are sent to her home. Now what is the reason of this? Possibly she may not like to ask for a single powder there, but in all probability she imagines the powders are cheaper in the store; so they are. She pays for a dozen at the store, while in the other case a single powder is charged and she may pay for it six months hence. She likes to have an account in the chemists because it is so useful. He will cash a cheque for her, ring up someone on the 'phone, or give her stamps on a Sunday night. A lady has been known to ask for the use of a chemist's 'phone in order to give an order to a store! This particular lady had a yearly account with the chemist and a deposit account with the store. Can that sort of thing be prevented? It cannot. The chemist must just grin and bear it. He suffers from a delusion which is popular with the trade or profession (whichever is correct) that he is the servant of the public, and that is the cause of his being a downtrodden member of the community. He has brought it upon himself by being so obliging and anxious to please.

What happens after a street accident? Although one certainly has sympathetic feelings towards anyone hurt in the street, why should the poor chemist be the person to have his business interrupted by having the injured party carried into his shop? It is only because he has taken such responsibilities upon himself in previous times. In all probability he supplies a certain quantity of dressings and bandages, and in nine cases out of ten he will get no payment, and that in addition to having his shop work disorganised. Of course, it may be argued that the chemist is in the best position for rendering first aid, and that fact is not disputed here, but in these days of infirmaries and ambulance-classes such a thing should not be required of a chemist any more than from a watch-maker or draper. If he is paid for the work, then one can have no objection. But how often does he get any remuneration at all? Other kinds of customers to whom he is useful are those who have got a speck in the eye

or a fish-bone in the throat, or, again, those who may require advice for a festering finger, and so on.

Now, again, it may be said here that the chemist is the only man (doctor excepted) who can give satisfactory advice or perform the operation required. But in many cases these people buy their medicines and other goods in stores, and that is where the grievance lies. Why do these people not go to the doctor? Because they know that he makes a charge, and they also know that the chemist is delighted to do all these things for nothing. He makes such enormous profits selling penny boxes of pills and ointments that he can afford to do that. Another way in which the chemist is useful to some of his customers is to test the stores.

In many cases the customer takes a new prescription to the private chemist to be dispensed; but does he take it a second time to be repeated? The type of customer referred to does not, unless it happens that the store is shut before he has had time to get it filled there. The chemist does not think of that; he fondly imagines that he is their customer, and that they would never dream of going to the stores. What actually happens? The person gets the new prescription filled at the chemist's first. Why? In the first place, to be able to know whether the store gives the proper medicine; and, secondly, to note the difference in price. If the medicine appears to be the same, then the prescription never goes back to the chemist, but may be filled at the store a dozen times, or even more. Such cases have been observed, and often a prescription is repeated over a number of years—a laxative pill, for example. The original prescription may be for a dozen pills, the repeated quantities may be ordered in gross quantities, and, meanwhile, the chemist has seen the recipe once, and for a dozen pills only. That is one of the great differences between a store and a private chemist's dispensing-business. No wonder he (the private chemist) thinks that people do not take so much medicine nowadays, that hospitals and infirmaries have taken away his business, to say nothing of private nursing-homes and treatment by sera. The real facts have been mentioned above.

On the other hand, it is interesting to know how customers act towards the assistants in stores compared with those in the employment of a private chemist. It is a well-known fact that a possible purchaser has to wait a minute or two in a little shop, but the same person will absolutely refuse to wait two seconds in a store. If the salesmen are all occupied a lady has been known to turn at once and leave the place. If she arrives at the counter and no one there to attend to her, woe betide the missing salesmen! As it is usually a lady who causes the trouble, the examples quoted have reference to the female sex. If she be a querulous individual, she will invariably complain to the managing director or the general manager, entirely neglecting the buyer of the department in her anxiety to cause as much trouble as possible. Then an inquiry follows. Another point which may be noted is, if a mistake should be made in an order, the salesman is always blamed, no matter whether he be really at fault or not. The customer is always right. Now, that statement may seem a contradiction of what has already been mentioned regarding the anxiety of the chemist to please. But there is this difference: The latter is quite eager and willing to go out of his province entirely to please his customer, whereas with the stores the assumption of the customer being in the right is in connection with an order given and with a view to obtain future orders. But they do not undertake to bandage a wound, or speak at the 'phone for someone who is unable to use it. These operations take up too much time, especially when the remuneration is considered.

A chemist ought to let his customers see that he has every confidence in his assistants' ability to attend to their needs. He ought not to come behind his assistant's back, make suggestions, and, what is worse, interrupt the assistant while discharging his duties—not even although the customer has her motor-car and attendants at the door. It gives that person a false idea of her im-

portance. He ought always to bear in mind the fact that it is very possible that this particular customer has an account or deals largely in the store, and that all he or she gets there while purchasing is attention and civility, and one assistant only to bestow that. Another thing the chemist should bear in mind when he gets a prescription for the first time is that there is nothing to prevent his customer from taking it to the stores afterwards. Hence he ought not to charge an immoderate price for it. The public would rather get their medicines from a first-class pharmacist than from the stores, because there is no doubt that a large part of the community have a distrust of these places, but they do not like to be overcharged.—*Trabajo*.

Wanted! A Directory of Pharmacists.

Having experienced a twelve-months' rest from the ordinary daily routine as a practising pharmacist, I have had during that time several occasions to seek information concerning the conditions of pharmacy in various towns without the necessity of making a personal visit. Had I been searching for similar particulars in the capacity of a medical man, clergyman, dentist, optician, or Local Government official, I could easily have obtained a volume of practical utility, one arranged in such a method as to facilitate research. I am, therefore, convinced that the time has arrived either to remodel the official register of chemists or add an up-to-date appendix to it. To some thousands of pharmacists the present register—published by authority—is an unknown compilation, and I estimate that, excluding divisional secretaries, not one in every 500 pharmacies is in possession of a recent copy. I have visited hundreds of pharmacies and worked in thirty different ones, but do not remember ever noticing the vivid scarlet cover among the usual motley collection of pharmaceutical tomes.

It may not be generally known that each year some 2,000 copies of a correct chemists' register are required by the County Courts, coroners, and other officials throughout Great Britain. These are supplied by the Government, so there is the nucleus of a good order to let the publishers financially. Yet the register is produced just as it was fifty years or more ago. There is a prelude of Pharmacy Acts, followed by an alphabetical list of pharmaceutical chemists, their addresses, and certificate numbers. Then follows a larger alphabetical list of all registered chemists and druggists, including "Major" as well as "Minor"—one instance where the less includes the greater. This is a statutory obligation to understand. More attention should be given to the addresses, many hundreds of which are incorrect. This defect arises at the time of registration, when the newly qualified chemists generally give the addresses of their parents, and when once on the register some addresses remain twenty years or more incorrect. Pharmacists out of business should not figure in the same category as those following their calling. They lose interest in the Society, and in some instances their names are left on the register for years after they are dead and gone. A revised register should consist of two parts, either of which could be printed separately—viz., the

(1) Alphabetical list of all pharmacists, with their addresses, qualification, and date of registration.

(2) A directory arranged alphabetically as regards counties and towns of England, Scotland, and Wales, giving under each town the names of establishments under qualified proprietorship or managership.

The names of qualified managers and assistants should be given when possible; additional information which could popularise such a directory among wholesale firms and others would be a note on the population, market-day, and closing-day at each town.

I am aware that a directory of chemists and druggists is published at 21s. This appears at intervals every few years, but does not confine itself to *qualified* members in the trade, and in addition includes manufacturers of aerated-waters and other products on the borderland of chemistry. The Pharmaceutical Society possess all the information necessary for the purposes

stated. Supposing one wants to know how many chemists there are in a particular market town, it is no easy task to search through some 16,000 names and addresses scattered in the two hemispheres. Pharmacists in the Colonies should have a special section devoted to them, also those in other parts abroad, and those on the retired list. Even if such a directory was published, say, every three years, as an appendix to the revised register, the innovation would tend to raise the status of the pharmacist and popularise the Society. The craft would get to know one another better, and ascertain who is who in the drug-trade. The chemist in search of an opening for a new business could be saved many a futile railway journey by consulting the book, and it would check unqualified trading by companies and others better than half-a-dozen paid inquiry agents. An index of initials or signs could be used to identify members of the Council, Prizemen, Fellows of the Chemical Society, qualified opticians, public dispensers, wholesalers (qualified).

Such a book as I suggest could be published with profit to the Society, and ought not to cost more than half-a-guinea, half price to members.—*W. Maskew*.

Discounting.

To these observations and reflections, which we alone are responsible for describing as "trade growls," we may add the following by Jay Mack on the subject which is uppermost in the minds of panel chemists:

Mr. Granville Shaw's article in the *C. & D.* of January 16, is excellent and to the point. It is high time we put before the Chancellor the facts of our case, just as we did to Mr. Masterman a few months ago, when the latter was so much impressed by the facts we then produced. There is a big balance of debt accumulating against many retail chemists in the books of wholesale houses, mainly through discounting. Personally, although I can avoid a loss and even make a profit on 80 per cent. of my account, that is only done by doing without an assistant and *giving my own services absolutely free*. Three hundreds pounds is about as much as I can do yearly; take 20 per cent. off=60l., would only pay for a very young man at 25s. a week. So that if I had been ass enough to employ even a 60l. man, I could *not have avoided a serious loss*, even when I gave my own services free, because my ordinary working expenses are 20 per cent. on turnover. Here are

Trading Accounts of Chemists under Discounting.

Working with £300 of dispensing turnover for 9,000 prescriptions at 8d. each.

Gross Profit.		Expenses.	
One-third of £300 =	£100	Junior's Wages ...	£60
Loss	80	Ordinary working expenses	60
		20 per cent. ...	60
		20 per cent. discounted ...	60
	£180		£180

If I had qualified labour at £100 a year the total loss would be £120.

Gross Profit.		Expenses.	
One-third of £300 =	£100	Ordinary expenses ...	£60
Loss	20	20 per cent. discounted ...	60
	£120		£120

When the chemist does the work for nothing.

Shop and services free.

Gross Profit.		Expenses.	
One-third of £300 =	£100	Services free ...	£—
		Shop lent free ...	—
		20 per cent. discounted ...	60
		Profit	40
	£100		£100

If the gross profit sinks below 33½ per cent., the work is not worth the risks involved in dispensing 9,000 prescriptions. But I look upon it as a duty we owe to the nation at large, and I am in hopes that when (1) the useless clerical work imposed on the doctor is turned into keeping a record of cases, (2) the public understand Insurance better, they will cease to waste drugs as they are doing—there will be a reasonable profit for the chemist for his share of the work. There have been mistakes on both sides—by the doctors and by druggists; but whereas the druggist is called upon to pay for the doctor's mistakes and lavishness, the latter has not suffered financially like the druggist. Many druggists were none too sound finan-

cially before the Act, because, dealing as we do in ten thousand articles, it has become one of the surest ways to bankruptcy, instead of—fifty years ago—a sure way to a competence. Right from the first I said it would not pay for qualified labour, and that was *presuming 100 per cent. of our accounts*. In the *C. & D.*, October 5, 1912, there occurs the "Ballad of the Blasted Hope":

And "Xrayser" for the chemist prophesied a brighter day,

Though "Jay Mack" (the mercenary) hinted it would never pay.

I can see that this discounting clause is not understood by chemists, and I will try to expound the gospel to them. Keep in mind, please, that you are not all "top sawyers" at system like me, and that while I have just saved my bacon, you are not only losing yours, but you are getting deeper into debt every year. Men write to me weekly on this point, besides the list of suicides and bankruptcies we have. Few men would care to live the life I lead: I give myself up entirely to business, and most of my half-days and Sundays are spent in bed. I take a savage delight in finding out the weak spots of would-be benevolent schemes, like National Insurance and Co-operation, and in devising schemes to defeat the ill effects that such schemes would otherwise have on my own business. Business with me is a hobby; that's why, I suppose, the Editor allows me to occupy so much space in order to tell some of you what I think you are overlooking.

The discounting clause was intended to throw the onus on to the doctors and druggists of denouncing malingering. Look at the paltry results of that special inquiry held into "Excessive Sickness"—mark the words, not excessive drug-wasting or drug-swallowing as we allege goes on. See how careful they are of offending the susceptibilities of the insured persons; was it not shocking when they had to provide female inspectors in certain Lancashire districts where the women workers were going on the club in order to do their spring cleaning? Remember the cartoon in the Aberdeen paper of the chemist chucking out the insured malingeringer because "You have had too much already." The Government inquiry by the eminent auditor, Sir Wm. Plender, proved that the cost of drugs to some doctors had been 6d. per head. Well, the Act was to provide much better physic, and regular buckets of it, so (as a safeguard) on goes the discounting clause. If never needed, all right; if needed, then the blame be on those medicine-men for slandering the insured person, and those daily papers for publishing wicked cartoons. This is all in the game. This is all in the process of teaching the insured persons through the chemists if the doctors failed to do it. But as the chemist was supported by Mr. Lloyd George against the doctors, when he might have got peace by giving the dispensing to the doctors, well I reckon that Mr. Lloyd George depends on us to continue to help all we can. A section of the doctors started out to wreck the Act by sheer wilful waste. We know that; but we know also that it was the discounting clause which was the means of bringing that waste to light. If the waste had gone on, and not exceeded the available money, the necessary health teaching would not have been administered to the insured persons. Practically that would mean the continuance of the old club system, with all its drawbacks and no great health improvement—simply increased drug-swallowing. It was a chemist, I believe, who got malt and cod-liver oil on the Tariff. Therefore the discounting clause was a hint to us that, if we wanted to give the working man medical comforts, we must see that he did not waste medicine. Again they threw on to chemists the onus of being the teachers.

The opinion of the nation at large was in 1912: "The doctors and the chemists have got a mighty good thing." By 1914 the opinion had become: "The doctors have done mighty well out of it." By 1915 the opinion has become openly expressed in the Press: "There's something rotten if these chemists are not being paid for the goods they supply." Even the doctors who write these misleading letters to "The Lancet" have never attempted to say that any possible errors or overcharges in the chemists' accounts could equal some of the shameful examples of careless prescribing which were put before Mr. Masterman a few months ago. Scores of cases in the same districts where doctors were prescribing at 10s. per head of their panel, and at 2s. and even 1s. (all in the same district). Public opinion is quite clear on the point. The Friendly Societies are adopting a safeguard of specially examining malingeringers who are getting a lot of club money. You see, the game is being played out just as the Government seemed to intend. There's one safeguard which I suggest to the Chancellor, and that is the bonus system for every insured person who has no sick-pay in any one year.

Some Errand-boys.

(In these and succeeding sketches Wilfred S. Mare tells of some of those he has suffered at home and abroad.)

Although the errand-boy may be the least stone in the pharmaceutical structure, it is, perhaps, because he operates at the base that he can throw awry the whole concern. For instance, you may dispense Colonel J. Swankley Smith's prescription with the purest drugs procurable, you may wrap it in the whitest paper, and seal it with the most fashionable shade in sealing-wax, but if your errand-boy delivers the package at Jack S. Smith's fried-fish shop you may vainly flourish the heliotrope of wax in the purple face of the irate Colonel; he will hold you—you only—responsible for the vagaries of your messenger. And if you demonstrate the heinousness of his offence to the culprit himself, he will probably mutter something to the effect that "'Twas J. S. Smith on the embellose, an' 'ow was I to know?" or words of similar purport.



IN THE HOMELAND.

Extensive have been my sufferings at the hands of errand-boys, for I have had porters of various colours, by which I do not mean to infer varying degrees of cleanliness, but differences of nationality, of language, and of religion. The first two are apparent difficulties, but you may imagine that the religion of a porter does not matter—till you have grappled with the caste rules of the Hindoo, as I have done, and have insisted on having your will executed at the point of the paper-weight!—of which cast-iron method more anon. As a direct contrast, the silken-glove method obtains with the polite youth of the home of liberty, equality, and fraternity; it is quite a hand-in-glove system with the Parisian *garçon*. Others than pharmacists are realising that British taciturnity and French fluency may blend in no uncertain voice that may even cry "Halt!" to War Lords. But it is not of international war I am essaying to write, but of the everlasting combat between the errand-boy and the unfortunate individual who tries to get work out of the aforesaid conscientious objector. I will briefly recall my experiences.

I.—The Oriental "Boy."

I often long for the East and the summary method of dealing with refractory messengers employed in that least democratic region of the world. For instance I had as a porter a Chittagonian "boy" of some forty years, who wore a miniature sunbonnet on his head, a shaggy beard on his chin, and nothing on his feet. There were occasions when he would wag his black beard and swear by the Prophet that such-and-such a thing could not be done. My chief argument took the shape of a cast-iron paper-weight, which I would project along the floor till it impressed the point on the heel of the "boy." All differences were thus quickly healed; for, when lying seriously ill, there was no more assiduous caller to inquire after my progress than the Chittagonian porter.

Another "boy" with towering turban, flowing black beard, and voluminous white robe used to open the carriage-doors during the day and sleep on the doorstep during the night. He was a gentle creature, always



"IMPRESSED THE POINT ON THE HEEL."

a picture of spruceness. "Head plenty much paining, Sahib," said he one day. "Suisti wallah" (lazy fellow), replied, and urged him to get on with his work. But it was something more than the usual langour this time; he was dead of bubonic plague in less than twenty-four hours.

In a frontier pharmacy in Northern Burma Moun Shwe was my *lugalay*, or boy. Standing at the portal as still as a statue, his blue-black hair in a big oil upon his head, clad in his *lungyi* (in shape something like a sack without a bottom), he loved to gaze sleepily across the dahlias and plantains of the pharmacy compound to the *parawun* (enclosure) of the Buddhist monastery, where the pigeons cooed and the small boys shouted their lessons. I have a photograph of Moun Shwe and his son and wife. On ordinary occasions the babe wore a smile, but my boy bought a horrid Manchester gownlet at the bazaar, and the doctor *thakin* (myself) was prayed to photograph the avilised young heir. Yes, Moun Shwe was a dream of "boy"; though you despatched him with his basket, containing a powerful potion for a cholera patient, a powder for a child in convulsions, a composing draught for a sunstroke case, it might be a bottle of medicine for the very Lieutenant-Governor himself, my Monolian messenger must needs rest by the way, and, perforce, sleep. He would subsequently agree with you as to his great wickedness, but in his eyes you could read a mighty pity for these English who make life a rush instead of an enjoyable saunter. I suffered much at your docile hands, O Burman *lugalay*, but I forgive and envy you.

II.—The Parisian Garçon.

It was certainly a direct contrast to find oneself in a Parisian pharmacy after some years in an Eastern medical-hall, and besides being a test of one's adaptability, was quite a new experience for the pampered *garçon* of the land of liberty, equality, and fraternity. Emile stared aghast at my first cast-iron methods, and I found myself quickly readjusting my methods of government. Emile was as brimming over with politeness as a London boy with "cheek"; Jean and Marcel, his subordinates, took their cue from him, and to see the interchange of courtesies as these errand-boys passed each other in the boulevards was a revelation to the barbarian islander. I found that a "Bon jour, Monsieur Emile," in the morning, followed by plenty of "S'il vous plait" during the day, made him my willing slave.

The head of the Anglo-French pharmacy of which I wrote was a jolly John Bull of an Englishman who occasionally suffered from spasms of vinous wrath; he spoke scathingly to Emile one morning about some petty mistake. The *garçon's* pride was wounded past healing, and he politely gave notice in a few delicate words. I knew that Emile had a little home, a wife, and children; and the post was one he could not easily duplicate elsewhere.

I tried to reason with the inflexible *garçon*. "Monsieur X. est pas polite—pas polite—pas polite" was the final argument. In vain I suggested passing irritability and superfluity of *vin rouge* on the one hand, and a good berth and the claims of a young family on the other; the negative quality of Monsieur X.'s politeness was an insurmountable barrier to Emile.



"MONSIEUR X. EST PAS POLITE."

An emergency necessitated the engaging of the one applicant for a vacant post in our porter staff, and we endured the vagaries of an Apache—for one week only. It was quite a relief to find they were not all Emiles in the *garçon* world. All sorts of things happened in that week, and a little *gendarme* patrolled the pavement across the road watching all our pharmaceutical doings with suspicious eyes. But it was domestic rather than foreign trouble that led to the Apache's expulsion. I found Mademoiselle, the official packer of the stock, in a fit upon the floor, Jean weeping copiously over a bleeding nose (bleeding from a scratch, not a blow), Marcel hiding under the table in fear of his life, and the Apache clawing and jabbering amid a chaos of bottles which rained from the shelves around. I felt that the manners of the drug and stock room would be corrupted, besides spoiling all the romance of French politeness that I had thought universal among Parisian *garçons*. The Apache found other fields for his exploits; I trust the battlefields of Belgium have afforded him scope.

III.—The Italian Porter.

Stefano is the Italian "boy" at whose hands I suffered much, though there was not the slightest malice in the dear fat fellow. My memories of him are redolent of—garlic! I was dispenser in an Anglo-Italian establishment at the time. Stefano for six months in the year was a village carpenter away up the mule-tracks among the olive terraces of the lower slopes of the Ligurian Alps. When the autumn came he migrated to the Rivieran town to act as *garçon* at the *farmacia* where the *Inghlesi's* wants were met—more or less; they were never met as regards price. Fat, rubicund, placid, and fair, Stefano was a contrast to the youngest of the messenger-staff, skinny, alert, dark, mischief-loving little Jaccomo, who, to my English eyes, seemed to lack one thing—the inevitable monkey that one saw with such a boy in London. Garlic-loving Stefano would indulge in the vegetable of pestiferous odour at least thrice a week, in spite of our protests and prayers. I can see him now in imagination, hurrying back from his midday meal, crossing the pharmacy floor, purple of face, hand over his mouth, and scarcely daring to breathe, promptly to disappear into the lower regions pursued by forcible language and—a tenanted boot. On those sultry days we avoided summoning Stefano until absolutely necessary. "Jaccomo, sortiri," would be our cry, rather than "Stefano sortiri," seeing the latter summons called up Stefano—*plus* garlic!

The third messenger was a most lugubrious individual named Baptista, who suffered from a too pious mother, it appeared. He was very fond of the said mother, and



"GAELIC-LOVING STEFANO."

was wont to give her his weekly wage, which she forthwith handed over to the priest that, in due course, Masses might be said for the repose of her soul. Baptista would tighten his belt and weep over the belted vacuum that his mother's housekeeping failed adequately to replenish. Little Giacomo would regale Baptista with the remnants of his none too plenteous dinner, but we absolutely forbade Stefano to add as much as a grain of his garlic abomination to the belowstairs meal.

I will not detail the early sufferings I underwent at the hands of those errand-boys who neither understood my language nor I theirs. And even when one could make oneself understood the "*dolce far niente*" Italian preferred not to fathom your meaning—when it entailed any labour on his part.

(To be continued.)

Eighteenth-century Advertising.

THE following extract from the "*Mercure de France*" of April 1776 may interest those who imagine that advertising is an essentially modern practice:

The Treasure of the Mouth.

M. Pierre Bocquillon, perfumer and glover at Paris, at the sign of the Providence, rue St. Antoine, informs the public that his liqueur, "*The Treasure of the Mouth*," of which he is the sole preparator, was received and approved by the Royal Committee on Medicine on October 11, 1773. Its admirable virtues assure its preference and establish its high reputation.

Its property is to cure all toothaches, no matter how violent, to purge them of venom, cancer, abscess, and ulcer, and finally to preserve the mouth from all which tends to injure the teeth; it preserves the latter, even if decayed. It has a most agreeable taste. The maker daily receives new testimonials, continually sent him by the most distinguished personages. He sells it in bottles of 10, 5, 3 livres and 1 livre 4 s. He gives directions for use signed and initialed by himself. His Christian and surname appear on the labels of bottles as well as on the cork marked with his seal, and has a board over his door to prevent all mistake.

Impressions of Montreal.

By an English Pharmacist.

IT was Sunday evening when the ship which brought me from England was safely berthed on the quay-side at Montreal. After nine days aboard everyone was anxious to get on *terra firma* again, and quickly the long shed was alive with anxious people, and lengthy queues formed at the ticket offices of the Canadian Pacific and Grand Trunk Railways, while several hundreds waited in groups, in alphabetical order, for the Customs officials to pass their baggage. Having passed the Customs, the next thing was to get away with one's baggage, which was not so simple on account of the scarcity of vehicles. It was quite an hour after landing before I was able to get possession of a cab, and as the hotel was but a quarter of a mile away it was not a long journey. It sufficed, however, to teach me my first lesson in the money values of the country, as the fare was \$1, which to the Londoner will seem an exorbitant amount. During the night it snowed and froze very hard, but the hotel, being steam heated, was warm and comfortable. My first walk in the principal streets of the city will long be remembered on account of the fearful state of slush which prevailed, owing to the downfall of snow during the night. Those who live in Montreal were prepared for it, as all seemed to wear rubber over-shoes to prevent slipping and to keep out the wet snow. St. Catherine Street West, the principal shopping street, contains the best pharmacies, but these are not fine by comparison with those of other cities of the world. Very few of the pharmacies are devoted to pure pharmacy. Such adjuncts were displayed prominently as flowers, whisk-brushes, hot and cold drinks, chocolates and sweets, safety razors, and fountain-pens. One or two shops appear to aspire to pure pharmacy and make a point of advertising dispensing. Two-thirds of the pharmacies are owned by Frenchmen, the French language being equally used with English. "Cut-prices" is an inscription prominently displayed on several shops, principally American. I append a few of the prices (in English currency) for comparison:

	s. d.		s. d.
Mennen's Powder ...	0 7	C.B.Q. Tablets ...	0 7
Carter's Pills ...	0 7	Evans's Pastilles ...	0 9
Eno's Fruit-salt, 4s. 2d.		Glycerin, 8 oz.	1 0
size ...	2 5	Camphorated oil, 8 oz.	1 0
Fellows' Syrup, 6s. 3d.		Boric acid, lb.	0 6½
size ...	3 8½	Borax, lb.	0 4
Steedman's Powders	0 9½	Blaud's pills, 100	0 8
Calox Tooth-powder	0 9½	Absorbent wool, lb.	1 5
Danderine ...	0 9½	Aspirin tablets, 100	2 5½

It will be seen from this selection that many prices are below those charged in England. Dispensing, however, is charged at a much higher rate than at home, a not uncommon price for a bottle of medicine being \$1. Respecting the legal standing of pharmacy in the Province of Quebec, it is on a sounder basis than in England, the requirements of the Pharmacy Act being more stringent than in the United Kingdom. There are also special Acts governing the sale of habit-forming drugs. One or two points which strengthen the pharmacist's position are that no unregistered person is allowed to take any part in the business of a pharmacy. There are three degrees of registration—the apprentice, equivalent to our student associate; the clerk, with a qualification near our Minor; and the licentiate, whose qualification is between the British Minor and Major. Only the licentiate is allowed to keep "open shop." The clerk is a qualified assistant; the apprentice is in the position of an unqualified English assistant. The Registrar keeps a record of every assistant engaged in every pharmacy. Examinations are held twice a year—the first in Montreal, the second in Quebec. There is at present no reciprocity, not even with neighbouring provinces such as Ontario. Certificates of other examining bodies may be accepted for registration for the degree of "Clerk." In Montreal a knowledge of the French language is a necessity. The hours of business in pharmacies are longer than in the "Old Country," many being open until 11 P.M. daily.

Reminiscences.

By A Sexagenarian.

IT is more than fifty years since I actually entered the drug-trade, and considerably more since my acquaintance with it began. My apprenticeship dates from 1862, and it was for a term of four years, the premium paid for me being 60*l*. In consideration of this I was to have an hour a day allowed for study and one evening per week for attendance at lectures. My master was a pharmaceutical chemist without examination, having joined the Society before 1852. His business was in the best residential quarter of one of our largest seaport towns, and many of the leading families of the place were among his regular customers. He did, however, as was then usual, a very mixed trade, but with a considerable amount of dispensing, for doctors were in those days either less greedy or less industrious than they appear to be now. He was thoroughly well up in all the practical part of the business, but made no pretence to any particular scientific knowledge, in which, again, he was like at least the more honest of his fellow "chemists." The only teaching I got from him was therefore of a more or less happy-go-lucky sort; in fact, it consisted in my being allowed to do most of the work of the shop under the supervision of Providence and, incidentally, of himself. My hour of study had perforce to be spent in the shop, and was subject to interruptions by customers. As for lectures, the only things of the kind in the town were the weekly or monthly meetings (I forget which) of the local Chemists' Association, which I was at liberty to attend whenever the governor did not care to do so. There was very good coffee to be had at these meetings, and I dare say the discussions on trade questions (to say nothing of the gossip) were interesting enough to the older members, but, generally speaking, they were about as scientific as Mr. Pickwick's dissertation on the Hampstead Ponds. I did, indeed, on one occasion hear a scientific lecture there from a local F.C.S., whose science may have been unimpeachable, but whose oratory belonged to the order I have heard described as the "abstruse-cositive," and did not readily lend itself to exposition. I gathered from the manner in which the lecture was received, and the remarks which followed, that the audience generally knew no more of the subject than I did, and cared even less for it. Much more in the ordinary course was a paper read by another member on the way to run a patent medicine. I remember he laid it down as an axiom that if the actual cost of the ingredients to the proprietor were more than 2*d*. per 1*s*. 1*d*. bottle, no such venture could possibly pay for advertising. As he was himself the proprietor of a fairly successful "patent," this seemed to me worth making a note of. It is only fair to add that I soon ceased to attend these meetings, but I am sure they had virtually no educative value.

There was, however, a library in connection with the Chemists' Association which I was allowed to use. Unfortunately most of the books were hopelessly out of date, and I had nobody to guide me in selecting from them. I gained a good deal of interesting information concerning the older school of chemists (including alchemists, for I was determined to be thorough), and almost mastered the Linnean system of botany before I discovered that it had been superseded by the Natural Orders; but the library was of no real use to me, and I therefore temporarily relinquished my ambition to die President of the Pharmaceutical Society, and devoted my one evening per week to recreation pure and simple.

The examinations were not then compulsory; nobody seemed to care for them or the distinction to be gained by them, and in the whole course of my apprenticeship I never, so far as I remember, met with or even heard of more than one man who had passed them. Those, indeed, were the days in which Mr. Cyrus Buott was somewhat of a power in the land, and though his eloquence was dazzling rather than illuminative, I understood from him that the Society's reputation of iniquity was almost full and we need not pay much attention to it. The only person who spoke to me in a contrary sense was, I believe, a Mr. R., a neighbour in the trade, from whom, as he kept a post-office, we got our stamps for sale. He was a very superior, lady-like gentleman, with a slightly supercilious manner, and a mild vein

of something he mistook for humour, which he was in the habit of playing off on me. I held him in some awe until I discovered that he was an unexamined man himself, and had found means to convince him that my sense of humour was quite as well-developed as his own, though possibly not so delicate.

Our hours of business in those days were from 8 to 10.30, or 12 on Saturdays, with Sunday duty from 6 to 9 p.m., but I had no Sunday work during my apprenticeship. My duty on weekdays was entirely in the shop, except that occasionally I had to help the errand-boy in the cellar to make blacking, furniture-polish, brass-paste, or some such preparation more or less remotely connected with pharmacy. For our trade was, as I have said, a mixed one, and the "family" department was the larger part of it. Still, we did enough dispensing to employ one pair of hands for a considerable portion of the day, and it very often happened that mine were the only pair available, which was fortunate for me. We made none of the strictly pharmaceutical preparations, except two or three of the simpler tinctures, but everything employed in medicine was ordered in strict accordance with the Pharmacopœia. But in a business where practically everything was bought ready-made, and I had no real opportunity for study, it was impossible for me to acquire much knowledge of pharmacy proper; and though I made what study I could of the Pharmacopœia, I found myself at a great disadvantage when in my next situation I had to make everything it was any way possible to make in an ordinary pharmacy. Still, I had learnt to dispense quickly and accurately, and when my apprenticeship was over I was as well qualified for an assistant's situation as most of the young men I have in subsequent years had in my employ.

The kind of apprenticeship I have been describing was, no doubt, very faulty, but I believe it made better men of business than a more scientific training is likely to do, and it certainly taught us some things of which our modern young men seem generally to be ignorant. Perhaps they are scarcely worth knowing; perhaps we have outgrown them. Be this as it may, I am pretty certain that, poor as was the chemist and druggist's lot even in those days, it is, from a commercial point of view at any rate, worse now. Can we afford to ignore that point of view? That is the question.

Belfast "Poisonous" Bottles.



THE PHOTOGRAPH from which the above engraving has been made was sent to us in illustration of how some Belfast druggists comply with the regulations made under Section 5 of the Poisons and Pharmacy Act, 1908. From left to right they are: (1) Stout-bottle, label still on, and a carbolic-label over it; (2) whisky-bottle labelled according to new regulations—ammonia; (3) lemonade-bottle with original label on—first used for carbolics by Health Department, afterwards by druggist; (4) whisky-bottle with original label on—ammonia; (5) lemonade-bottle containing ammonia; (6) sauce-bottle, original label still on—carbolic. These were collected in ordinary course of business in the course of a few weeks. We had the names of the vendors painted out. In each case a clear breach of the Act has been committed.

Chemists' Shop Bills.

IN many old pharmacies throughout England are hidden away old specimens of "Shop literature" which are apt to find their way into the waste-paper basket. Which is a pity, for some of them shed light upon trade methods

2nd Series] (No. 1)

THE

Eleventh Annual Circular

or

MESSRS. POTTS, BROTHERS,

Druggists and Dispensers,

No. 18, & No. 19,

NORTHUMBERLAND PLACE,

BATH.



"Ten hard uphill stages, and I have gotten me at last to ye goodly uplander. Now will I take revenge of mine Master of ye Publike, touching how much lighter—by his goodly apbr. prescribture—I may get climbe."

OLD TRAVELLER

Bath.

PUBLISHED BY POTTS BROTHERS,
18 & 19 Northumberland Place

PRINTED BY C. CLARK, 5, BRIDGE STREET
MILNOL

character, but the contrary," "Maxims touching profits, demand, and competition," "Of quality, and some quaint fancies thereto pertaining," and "Position and attitude towards the public. Apologetic. Conclusion." We quote from the last:

We have aimed to take up a central position, whence to suit equally every class, whether in respect of quality, fashion, or price. For good quality is needful alike to gentle and simple, and all have the same instinctive, and therefore just repugnance to pay for a thing more than they need pay. We have endeavoured to infuse into the conduct of business an intrinsic respectability, which should commend itself to straight-forward persons, of whatever grade, and to hold an attitude towards the Public, ready, liberal, and punctilious. If in aught we shall be thought to have fallen short of our endeavours, the candid reader, when he bethinks him of the difficulties incident to an untried voyage, and that each successive stage of its progress will leave one after another behind, may then, perchance, be brought to excuse it. Certes, our best exertions shall not be wanting to deserve, and therefore—may we hope? to obtain a repetition and furtherance of those favours for the which, as received during the departed year, we hold ourselves, The Public's obliged Servants.

A list of specialities follows, headed thus:



Medicine—the Key to Health.

Underneath is the line, "A bunch of the most useful keys," such as the Family Vegetable Pills, as well as

Eruptive Ointment; Heal-All, or Working Man's Friend; Potts' Vegetable Cough Lozenges; then a series of dental requisites is introduced with the startling announcement:

TOOTH DRAWING.

Fee—One Shilling. To the Working Classes, Sixpence.

Ducunt valentem Fata nolentem trahunt.

Latin and other quotations are a strong feature in the circular. Turning overleaf, we are introduced to the Fancy Department (perfumes, toilet preparations, and hair-dye), illustrated with the printer's stock block of a cornucopia filled with flowers. After this we have Bath Cream for the hair, Scented Soaps (with a basket of flowers and print), and Genuine Perfumed 'Bears' Grease (with the figure of Bruin which is not dead yet). A list of Medicinal Sundries occupies the tenth page. Of Pure Cod-liver Oil we are informed that "Messrs. P. have direct knowledge concerning the maker of their oil, and its manufacture." It was 3s. per pint. Camphor Ice is the next item, which disposes of the common idea that this "exquisitely cool and refreshing preparation for tender, rough, or chapped skin" is of American and comparatively recent origin. It was popular in Bath in 1850. After a page of Domestic Sundries the list ends with "Chlorogen, the most convenient and economical purifying & disinfecting agent," and Diarrhoea Mixture, with a Finis tail-piece of a village church, and a motto beyond which we dare not go on this occasion:

Eodem loco, eodem ministerio—Aspersi, Mariti, Sepulti.

The business of Mr. G. R. Hankinson, chemist, High Street, Uttoxeter, was founded in days long before Pharmacy Acts were thought of by Thomas Woolrich, apothecary and chemist, who later had his son as partner, and they traded as Thos. Woolrich & Son, chemists and druggists. Mr. Hankinson has favoured us with several specimens of their shop literature, and we reproduce one:

Cordial Balls FOR CALVES, &c.

A Sovereign Remedy for that fatal Disorder, called the Lax or Running Out, which Calves are so often afflicted with during the time they are Rearing.

*Prepared (only) by the Inventor, T. WOOLRICH,
Chemist, Uttoxeter.*

THE Proprietor has been favoured with so many unquestionable proofs, of the extraordinary efficacy which this Medicine possesses, from persons of the first respectability, that he can venture to pronounce it a certain and infallible cure.

The invariable success it has had in a great variety of cases, immediately under his own observation, convinces him of its superior utility: a single dose being more than nine times out of ten sufficient to effect a cure. This valuable restorative has obtained the sanction of some of the first farmers and graziers in the kingdom, and has been found equally efficacious for similar complaints in Cows, Sheep, &c.

Sold by appointment of the proprietor, by all the medicine venders who sell his Improved Diuretic Horse Balls, both in town and country, in Packets containing four and six doses in each, at 2s. and 3s. a Packet.

To prevent fraud, every Packet of this Medicine has a certificate affixed to it as follows:

I do hereby certify that this Packet of Calves Cordial Balls, is genuine and faithfully prepared by me, T. Woolrich.

DIRECTIONS FOR USE

As soon as it is discovered that Calves, Sheep, &c. have got the complaint, give a dose of this Medicine without making any alteration in their diet, or observing any other restraint, repeat the dose the next day, if necessary; but it rarely happens that there is occasion for a second dose.

If it be not convenient to administer this Medicine in the form of a Ball, it may be rendered in a liquid state by mixing it with a little warm gruel.

N.B. To a Cow give three of these Balls for one dose

Wetton, Printer.

The original of this measured 8½ in. by 6½ in. We hope to return to Mr. Hankinson's collection. It contains several specimens which are uncommon, besides a number of old invoices and billheads.

In Old France.

UNTIL the fifteenth century—as every reader of “Quentin Durward” is aware—the Dukedom of Burgundy rivalled in importance the Kingdom of France itself. M. Baudot, in his study of ancient Burgundian pharmacy, introduces us to a wealthy fourteenth-century widow named Sansenot, who was apothecary-grocer to no less a personage than the famous Philippe-le-Hardi himself. She evidently found the “bold” Duke’s custom lucrative, for she gave her son a thousand crowns (say, 2000l. sterling) when he married and took over the business in the Rue du Change in 1380. In 1408 (Jean-sans-seigneur, who took Paris after Agincourt, had then succeeded his father, Duke Philip) we have the inventory of this apothecary’s establishment at Dijon—the “ouvreur,” or front (retail) shop, with its cupboard, three heavy metal mortars, scales, etc., with vessels of pewter and earthenware all around, 30 lb. of ointments, 400 of oils and 250 syrups, besides electuaries and drugs. The “boticle” the warehouse, and there is a great room (probably a dining-room or shop parlour), a kitchen, etc., bedrooms above, a cellar in the basement.

Besides these rich apothecary-grocers, there were a number of surgeons and other professionals, who seem to have sold theriaca and other cure-alls. “Fearless John” had the courage to enforce regulations on the doctors in 1408, at the apothecaries escaped all supervision. He was assassinated in 1419. Philip the Good had a pharmacy drawn up in 1451, but it was practically ignored. It was only after the days depicted in “Quentin Durward,” and when Burgundy had become part of France (in 1490), that the Mayor of Dijon drew up regulations separating the grocers from the apothecaries, and the “triacleurs” (vendors of the theriaca or Venice treacle already added to) from both. The inspection of pharmacy was commenced, and the grocer-perfumer-apothecary (*espicier-mateur*) also disappeared. Henceforth the struggle of the apothecaries is against the mercers, the doctors, etc.—effectively the modern French epoch looms into view, and Burgundy as a separate State ceases to exist.

A GLIMPSE OF POITOU.

In the Middle Ages the apothecary was often attached to the person of an individual of rank or title. Thus we find among the list of *gentilshommes* and officers of Louis II. de la Trémouille in 1484 Jehan Raffard, apothecary, ranks nineteenth in order of precedence; he comes, in fact, after the barber, the *valet de chambre*, and the clerk. Nor does his salary (8 livres per annum, or about 10l. of our present money) seem to have been of importance superior to his station. In 1529 Mathurin Antier, apothecary to the Vicomte de Thouars, was paid 12 livres per annum, and no doubt found, as so many do nowadays, that salaries do not increase in strict proportion to the increased cost of living.

The position of the apprentice in Poitou is defined by a regulation of 1588. Indentures were the rule, but occasionally a verbal agreement sufficed. The apprentice was required to have a certain knowledge of grammar and to pay a premium; but the great object appears to have been to secure an assistant of irreproachable character and conduct. His parents were responsible for any embezzlement, etc.; the apothecary’s anxiety as to the moral side of his assistant’s character was rather due to the fact that he was supposed to initiate him into all the “mysteries” of the craft; briefly, to make him his confidant and right hand. After he had served his term—usually only three years, sometimes but two—he was classed as a *varlet* (assistant), *locatif* (hired man), *garçon* (porter), or *élève* (pupil), and spent another term, which might vary from five to ten years, before he actually commenced business on his own account. During this period he often made the “Tour de France,” that working pilgrimage which made the “journeyman” of the Middle Ages the all-round adept into his art as practised in different districts. He escaped from one temporary assistantship to another, sometimes footsore and penniless, but usually sure of his (so far as it lay in their power) from those of his own

craft. It sometimes happened, in those days as in our own, that through want of capital or other reasons the “varlet” never became in a position to commence business on his own account, and remained all his life a simple “apothicaire,” as distinguished from the “*maître apothicaire*.”

A Forgotten Proprietary.

PROBABLY the best-known proprietary in the seventeenth century was Lockyer’s pills, which now exist only as a memory. This result was not, however, what Lockyer’s admirers expected, if we may judge from the inscription on his tomb in Southwark Cathedral, London, S.E. Lionel Lockyer is stated to have declared that his pills were “extracted from the rays of the sun,” a declaration sufficiently cryptic to ensure a large sale for any



proprietary medicine. The illustration which we give was printed in the “Middlesex Hospital Journal,” and the following is the inscription which appears on the tablet behind the reclining figure of Lockyer:

“Here Lockyer lies interr’d, enough his name
Speakes one, hath few competitors in fame
A name so greateso gen’ral it may scorne
Inscriptions w^{ch} doe vulgar tombs adorne
A diminution ’tis to write in verse
His eulogies w^{ch} most men’s mouths rehearse
His virtues and his PILLS are soe well known
That envy can’t confine them under stone
But they’ll survive his dust and not expire
Till all things else at th^e universall fire.
This verse is lost, his PILLS embalm his safe
To future times without an epitaph.”

Lockyer died on April 26, 1672. The monument, in the north aisle of the Cathedral, is well worth a visit, especially as conveying the lesson that to make a success of anything one must have in it a strong and abiding faith.

LIQUORICE IN THE WEST INDIES.—The “Agricultural News,” of Barbados, states that seeds of the liquorice (*Glycyrrhiza glabra*) have been obtained from Kew by the Imperial Department of Agriculture for the West Indies for experimental cultivation in St. Kitts and other West Indian islands.

The Renaissance in Pharmacy.

IT is the mistaken belief of many that the Italian Renaissance was merely artistic in its tendencies, concerned with architecture, sculpture, painting, and literature. It was wider far than that. It was as the overflow of the Nile, fertilising every field of thought and endeavour. It had its effect even on pharmacy, advancing it well, and if proof be wanted we have it in the "First New and Universal Pharmaceutic Theatre or Codex," published in Venice in 1667 by the Juliana Press. It was compiled and edited (and this must have taken nigh a lifetime, so voluminous and encyclopædic are its contents) by Signors Melchius, Stecchini, and last and principally Sgobbis, whose name it bears. Its preface starts: "We, Reformers of the University of Padua, having examined and found nothing against the holy Catholic Church or its faith herein, do license its publishing. (Signed) Nicolini, March 17, 1665." So more than two and a-half years elapse twixt the licence and the publishing of the book. "Published by the industry of Antonio de Sgobbis at the sign of the Struzzi, Venice."

It begins with a description of the usual pharmaceutical operations for the preparation of the various galenicals, giving illustrations of the apparatus then in vogue, lettered, and their intimate uses explained much more carefully than is done at present. They do not leave anything to your imagination, all is in black and white. Then follow all galenicals with their planetic signs, the very oldest nomenclature. Thereafter, in Part II., comes the Universal Pharmacopœia in the following order:

Water, elixirs, spirits, distilled oils, expressed oils, tinctures, liquors, syrups, juleps, honey, syrups, fruit syrups, honey (hydrolised), medicated wines, medicated vinegars, juices, decoctions, infusions, potions, emulsions, gargles, clysters, baths, and other similar forms of medicaments.

Condensed juices and extracts, odoriferous balsams, electuaries, lohoch, jellies, conserves, condiments, liniments, ointments, and plasters.

Pills, troches, collyria, pomades, masticatories for toothache, etc., rotules or medicated-sugar sticks, confection, lapidi officinali (artificial), waxes, blisters, sinapism, plasters, suppositories, pessaries, soaps (perfumed), various powders and dragees, wheats and starches, the preparations sovereign, flowers, stones, and salts.

The classifications give an idea of thoroughness, and reference to the laudanums shows that there were twenty-five formulas, among them "Laudano London," which contained opium, saffron, castor, amber, musk, nutmeg, and rectified spirit.

The fact that at that distant date the idea of a Universal Pharmacopœia became a reality proves that a Renaissance is what we sadly require again to accomplish any such end. In a Continental pharmacy you require the Pharmacopœias of all nations. Although the metric system is general, strengths vary, and it often entails the stocking of three or four strengths of the same tincture, which is hardly a happy or creditable state of affairs, and a considerable step backwards from the year 1667. Many of the formulas contain ideas worthy of preserving that have been lost through the ages; and while viper's tongue and heart, toad's head, etc., are perhaps better forgotten, what pharmacist would not like to be in the position to dispense the following:

Electuary Giacinthino of Stecchini: Jacinth, Emerald, Sapphire, topaz, Ruby, Graniti, goldstone, Rhinosceros horn, of each five drachms. True unicorn, also bone of a hart's heart, coral red and white.

Then follow thirty-four other ingredients, embracing flowers, fruits, roots, seeds, finishing up with forty leaves of gold and a lemon-squash. The book contains formulas for 15 cataplasms, 20 collyria, 62 confections, 52 conserves, 60 simple decoctions, 90 compound ditto, 20 aqueous extracts, 100 simple ditto, 40 simple electuaries, 100 compound ditto, 60 simple infusions, 90 compound ditto, 8 gargles, 18 lohoch, 21 distilled oils, 95 pills, 142 powders, 19 purging morsels, 11 rotules, spirits, 13 suppositories, 72 trochisci, 40 syrups, 80 unguents, and 40 wines.

Literary Notes.

IN commemoration of its semi-centenary "Pharmaceutisch Weekblad" has published a series of reprint under the title of "Monumenta Pharmaceutica." These are not reprints from its own pages, but of historical articles by famous men which are more or less allied to pharmacy; in fact, the series may be said to be for pharmacy what has been done for chemistry by the Alembic Club of Edinburgh. The first issue of the "Monumenta" contains reprints of five papers in a large octavo of over a hundred pages. The report by M. de la Condamine to the Royal Academy of Sciences Paris, on the Cinchona Forests of South America ("Sur l'Arbre du Quinquina") is given in the original French. This paper is dated May 29, 1737, and with the reprint includes plates of the foliage, flowers, and fruit of the cinchona species described. An abstract of the paper in Dutch is also printed. Following this is a reprint of a paper by Smithson Tennant, F.R.S., "On the Means of Producing a Double Distillation by the Same Heat," which was read before the Royal Society of London on June 30, 1814. Smithson Tennant was a friend of James Watt, the inventor of the steam-engine, and with him visited Paris during the Revolution and brought back with him the first sample of Eau de Javelle which came to this country. With that and the invention of chlorinated lime (a more easily transported bleach) he helped to found the great alkali business with which the name of Tennant is associated. Smithson Tennant's paper of June 30, 1814, is given in "Monumenta" as the first of three which show the evolution of evaporation *in vacuo*. The figure is that of an ordinary still, or boiler, with the condensing worm passing into a second boiler. It is thus described in the paper:

"The temperature required for converting any fluid into vapour is dependent on the pressure of the air upon its surface, and may therefore be lowered if that pressure be diminished. If, then, the weight of the air was removed from water, it would rise into vapour below the common boiling point, and might therefore be distilled over by steam of the usual heat.

In order to produce this effect, a vessel having a receiver connected with it should be made air-tight, and the steam made to pass through the vessel along a worm or spiral tube of metal, in the manner represented in the annexed outline. The vacuum is now easily produced by applying heat to the vessel till the steam issues from the opening at it and in the receiver, when they are to be immediately closed, and the heat removed.

The water distilled over is collected in the receiver, which is kept cool for that purpose."

This was the germ of the vacuum apparatus, first described in Thomas Thomson's "Annals of Philosophy," vol. xi., 1818, as "Mr. Henry Tritton's patent for an improved apparatus for distilling." This article is also reprinted, and another, entitled "On a New Method of Preparing Pharmaceutical Extracts," by John T. Barry, which was communicated to the Medical and Chirurgic Society of London and published in vol. x., 1819, of the "Transactions" of that Society. This paper completes the series, and it shows conclusively that John T. Barry, who became a partner with Mr. William Allen in the Plough Court pharmacy, gave the idea to Mr. Tritton. It is mentioned in the reprint that Mr. Barry got the idea from Mr. E. C. Howard, who patented a vacuum pan in 1818 (*C. & D.*, 1897, I., 957). Following these three "Monumenta Pharmaceutica" is a reprint of Sertuerner's article entitled "Ueber das Morphinum, eine neue salfähige Grundlage, und die Mekonsäure, als Hauptbestandtheile des Opiums," from the "Annalen der Physik" of 1817; the original copper plate showing Derosne's "Opiumsalm" and "Morphium salze" is reproduced. An historical sketch in Dutch follows, in the course of which Sertuerner's reference to Derosne's 1818 discovery is supplemented by reference to Dr. Andrew Duncan's discovery in Edinburgh in the same year. The reprint concludes with a paper by G. J. Mulder entitled "Over de Opvoeding van den Apotheker," published in Amsterdam in 1842.

A Century Ago.

Reminiscence of the Hundred Days.

A PARISIAN correspondent who found himself in Canterbury recently was driven by his thoughts of the present war to hark back to what was happening in peaceful England a century ago, when the great Napoleon was making the Continent of Europe a pit of carnage which Kaiser Wilhelm has, by the aid of Krupp, more than emulated. In the Canterbury Library our correspondent spent an hour over the "Kentish Gazette" for 1815 and the following is the result:

As I read the grand old tale of British successes in the Hundred Days, I found my eyes continually straying to the advertisement columns. Here, for instance, is an old-fashioned New Year's Greeting (twice inserted) in January 1815:

"St. George's Street, Canterbury.

William Toovey, chemist, is induced from (*sic*) the very liberal support he has experienced throughout the late year, from the Clergy, Gentry, and Inhabitants of Canterbury and its vicinity, to make this public acknowledgement of their liberality evinced on his behalf, and presumes to hope, by a continued perseverance and attention to their several commands, to merit their future confidence.

N.B.—A general assortment of Perfumery and Proprietary Medicines."

The advertisements of proprietary medicines are quite a feature of the paper, and those who imagine that possible exaggeration as to their range of healing is essentially a modern evil might do well to study these announcements of 1815. Dr. Solomon, of Gilead House, Liverpool, offers a "Cordial Balm of Gilead" for "nervous complaints, indigestion, consumption, flatulence, relaxation, and obstruction of bilious disorders." Such a versatile remedy being so handy a thing to keep in the house, the doctor offers, besides the usual 11s. bottles, "four in a family bottle at 33s., by which one small bottle is saved."

One notes that Spilsbury's Patent Anti-Scorbutic Drops (No Dispensary, 15 Soho Square) cost 6s., 10s. 6d., and 12s.

Dr. Armstrong's Botanical Bitters for Cholera Morbus is priced at 11s. the pint bottle (quarts, 22s.); and Dr. Flor's Remedy for Deafness (Barclay & Son, Fleet Market) is 8s. 6d. per bottle. Tyce's Anti-Scorbutic Drops are 2s. 9d., but the purchaser can secure "five bottles for 2s. 9d. in one for 12s."

There are a few familiar names: Rowland's Macassar Oil sold by "Rowland & Son, corner of Kirby Street, Hatton Garden," as is also "Rowland's Essence of Tyre, or Imperial Oil." Dr. Steer's Opodeldoc and Dr. James's Analeptic are advertised by Newbery, who also offers "Essence of Coltsfoot for Coughs." This is "prepared by James Newbery, surgeon, Bristol, and sold by F. Newbery & Son, St. Paul's, London."

Jessel's Jesuit Drops, Amboyna Lotion for the Teeth, Church's Cough-drops were advertised by Edwards, St. Paul's, and Welch's Female-pills were sold at Fleet Street. A "Medical Institution" at 8 Tavistock Street, Bedford Square, announces that it cures "Scrophulous King's Evil, Consumption, and Nervous Complaints." Nutt, chemist, of Portsea, advertises "Fruit-lozenges for Sore Throats"; and J. P. Heath, of Nottingham, "Heath's Lozenges of Peppermint." The names of local agents (chemists in Kentish towns) are usually given, while it is evident that in certain cases the printers of the "Gazette" received orders from retailers and transmitted them to their advertisers.

The only local advertiser represents, curiously enough, a name (and I believe a family) still well known in Kentish retail pharmacy. Dr. Miller's proprietaries are "Prepared by James Stedman, druggist, Malling." Mr. Stedman is evidently believed in local references and testimonials, but attached more importance to their reliability than to their recent date. The testimonial for the "Nervous Cordial" (the frequency of such remedies seems to suggest that the Waterloo generation had "nerves" like our own) is sixty years old. But it is certified by a churchwarden.

The old-time vermifuge (Ching's Patent Lozenges) is recommended by the following Honourable Ladies, who have given it as medicine to their own children, and also the Parents of their respective neighbourhoods, with unparalleled success. The ladies include the Duchesses of Leeds and Rutland, and the Countesses of Darley and Shaftesbury. "Garden's Vegetable Essence for Coughs and Colds" (11 Gloucester Street, Queen's Square, Bloomsbury) is recommended by a Rye resident, whose testimonial is counterbalanced by the Vicar of the old Cinque Port.

Court Curiosities.

By a Law Official.

Law Court Loungers.

ONE of the most extraordinary sights in connection with our Law Courts is the people who attend regularly, day in and day out, and listen to the various cases that are decided there. At one of the metropolitan county courts, for instance, the same people put in an appearance every day that the Court is sitting. Many of them are not of the loafer type, but are very well dressed indeed. They are not in want of an office or a home judging by their prosperous demeanour, but they seem irresistibly attracted to the court to listen to the many things of interest to be heard there from time to time. I put myself to the trouble a little while ago to find out who and what these men really were, and the result of my inquiries was certainly interesting. One man who has been attending the court for at least five years proved to be a manufacturers' agent in business near by, whose work takes a very short time to get through, having only to call on a few people now and then for the orders which provide him with his income. These are executed by his manufacturers as a matter of course, and the accounts come in automatically, involving very little attention or office time. The rest of the man's time is occupied in listening with much interest to the various and curious stories which are revealed in court. Another man has an office in the City, where he executes commissions of one sort and another for a few clients, and these only take up an hour or so. Then by way of killing the rest of his time he comes to the court with the greatest regularity, and never leaves until the Court rises. He goes out for his luncheon at the midday adjournment, and returns within the half-hour allowed as if he were under some serious obligation to be punctually in his place. It is quite funny to see him coming breathlessly into court after the luncheon interval as if he were in danger of being a minute or two late for the resumption of the proceedings. He will then stay on, hour after hour, managing to arouse an interest which can never be awakened by the officers of the court themselves.

Of course, some of the loungers are of the lower type of human beings, and only sit in the court day after day because they have nowhere else to go; while others are getting on in years, rendering employment difficult. They seem to find the court a haven of refuge, for it is warm and fairly comfortable. At the old Central Criminal Court this class of loungeer was never encouraged or tolerated, and the men were accommodated (in one of the courts, at any rate) with seats where windows were both in front and behind them. When their presence was regarded as undesirable the windows were opened, which created so heavy a draught that they all decamped.

Another loungeer was a lady who sat intently listening to the procedure. But there was some method in her peculiarity, and it turned out after a time that she was anxious to qualify as the first lady barrister to practise in the English courts. She endeavoured on one occasion to appear as counsel for her father, who happened to be sued in a small matter; and, arrayed in cap and gown, she asked to be allowed to conduct the case as if she were a fully blown member of the English Bar. This desire of her heart was never gratified, for the Judge nipped it in the bud by refusing to listen to her. She persevered in her insistence to be allowed to act as her father's counsel, but in vain, and she eventually retired, never to adorn the court's benches again with her charming presence.

A GERMAN DEBT TO BRITAIN is the subject of a note by Mr. F. J. R. Carulla in the "Chemical News" (1914, 318). In this he tells how the German steel-industry has benefited by the Gilchrist-Thomas process, which a powerful combination of North German steel-manufacturers attempted to work, regardless of patent-rights, and fought the inventors in the law courts, partly on technical legal grounds, partly on other pretexts. Mr. Carulla adds: "Thomas died barely thirty-five years old, but not before laying Germany under a debt to Britain that her lately revealed intentions have ill repaid."

The Foreign Mail.

BEING extracts from various letter-bags of correspondence, chiefly from the Gold Coast, where the natives are most avid in their desire to read anything in English. The specimens we give from time to time are typical examples of how they express their desires.

To Messrs. Evans Sons Lescher & Webb, Ltd., 56 Hanover Street, Liverpool.

DEAR SIR,—I beg leave most respectfully to write you this unnoticed letter, but of which I do sure that you should be marvelled and pleasure to receive such unnoticed letter from a man that you have never heard before. I once saw your name and address in a certain News Paper and on a bottle of Medicine. I read the paper over and over about you, and obviously seeing that you dealt mostly on medicine; even this I was not quite appreciated until I met the same on a "Santonine Bottle," which fulfilled the allegation set out on the paper. Now therefore I honestly beg to say that "So do I." Please if it could be your approval to open trade with me, be kind enough to send me your price List as well as a sample of Santonine and any other you could get. As I don't want to speak multifariously therefore I want you to monopolise my discourse; for to be a gentleman does not depend upon a taylor.

Hope to receive reply from you not later than five weeks, because am hurry to open trade with you on this section.

Thanks in anticipation,

I am, yours faithfully, etc.

To Chesebrough Manufacturing Co., 42 Holborn Viaduct, London, E.C.

DEAR SIR,—I beg to give you information that I have determined to make up a great correspondence with you very hardly. So therefore I give you this great capacity and carbon arrangement. I have sent you a locanic sample of some Africans propoteys. I think if reach you, it will coincided you very annonyancy. Your sample which you close up me is have coicised with me very innocently. I am not too ambitiously. Because is now my great presumptuously falls on you. I enquire you to our correspondances must wide it very humbly. And after all you will get coincided order soon. I let you to examined all your letters and you find at any application among my own, which you received at appam I tell you. All I know them, they are school boys. Some there are three and four. So that they can't get some money to close you order because they are not affairs man. You know a merehant name called John Piggott at London, is one of my dealer; and I use to order some small goods, but is a delay merchant. God will Bless for your kinds regards.

I consider that if you receive this locanie lines it will pleases you very magnificently. Awaiting your fearther Commands. With Sincere wishes to you and all.

I am, sincerely yours, etc.

Remarkable Disinfectant et Aodorizer the Camphylene Company, Limited, Briant Street, New Cross Gate, London, S.E.

[From Naples.]

In possession of your respectable adress, because we have seen your treat disinfectant et Aodoriger Camphylene, and we as soon as to collate his business for the usage, we are made these letter, by asked you, the Catalogue, explain and price for this article. Possibly the price by to come in Italy.

We are occupied in acting of a play, we have made also ours offer of the services by rappresentance of your remarkable house.

Ours offre is made for ours place and all Italy, also if you are others articles.

We are sure, that if we are received the honour, of your relation, we can to unfold a good work. We will to augur us, that you are disposed, to made a contract with us, also for a period of proof.

We put to your disposition, ours references.

At pleasure to receive your favourable rencounter; with a perfect estecm, we are to salute to you.

The S. P. Charges Co., Manufacturing Chemists, St. Helens, Lanes.

DEAR SIR,—I having seen your name from the "British Medical Journal" recommending that you are the best medical man in city of St. Hlens, Lanes. So that I am writing you to send me your Catalogue, Samples, price list, and Almanack that I may see and order some as quick as possible. Awaiting your soon my Indent are waiting reply by retain steamer.

I am, yours Truly, etc.

Turkey Opium.

A WORK on opium has been published in French, entitled "La Culture du Pavot et le Commerce de l'Opium en Turquie," by Dr. Richard Millant, who has specially investigated conditions on the spot. There are three main chapters—Culture, Preparation, and Commerce—and we should say that this is the first book published dealing with the two latter phases of the opium industry in so authoritative a manner. The methods of selling opium in Constantinople, Smyrna, and Salonica are described in detail, together with the various conditions obtaining in each market. The examination of opium is a very elaborate affair, and is chiefly in the hands of experts—e.g., those in Smyrna have been drawn for more than a century from the Gabai family. Great reliance is, of course, placed on these experts, who can tell almost at a glance whether a cake is of the stipulated quality. The expert has a fixed fee (at Smyrna it is one piastre per tcheki of opium, or, say, 2d. per 1.66lb.). He examines the cases in the presence of the buyer and the seller. We are enabled to give a picture of the firm of MM. Nissim Taranto, of Constantinople, the



EXAMINING OPIUM AT CONSTANTINOPLE.

members of which are engaged in their daily occupation of examining opium on behalf of the merchants. On the right of the illustration an employé is seen emptying a basket of opium which is to be examined by Mr. Taranto and his son, both sitting at the table in the centre. Behind Mr. Taranto is another son, an apprentice to the business. The owner of the opium is standing by the scales near the weigher, and the cakes of opium near the window are those which have been rejected by the examiner. The correct examination of opium and the test for morphine are the principal elements for success in the opium-business. Formerly there were several German exporters of opium in Constantinople who shipped regularly to Germany, England, and America, but they were unable to carry out adequate analyses, and they came to grief. An instance occurred of one German firm selling opium guaranteed to contain 11½ per cent., whereas it contained 12 per cent.; on the contrary, a British firm in one instance were successful in claiming almost 1,200% from a German firm in Constantinople, they having contracted for opium testing 11½ per cent., and receiving 10½ per cent. Dr. Millant gives full particulars of the commerce in Turkey opium, describing the many qualities and their chief characteristics. The figures for the past twenty-five years are also given, and the local prices.

ZANZIBAR CHILLIES.—The exports from Zanzibar declined from 500,000 lb. to 75,000 lb. in 1913, the reason being that the native classes who formerly cultivated chillies have turned their attention to cloves.

European War.

xxii: Pharmaceutical Roll of Honour.

Non sibi sed patriæ.—CICERO.

NINETEENTH LIST.

CUNNINGHAM, S. H. (son of Mr. J. A. Cunningham, representative of John Thompson, Ltd., Liverpool), Northumbrian Divisional Cyclists' Corps, transferred from Durham Light Infantry.

CUZNER, H. Roy, chemist and druggist (of the representative staff of A. & M. Zimmermann, London), dispenser, 1st London R.A.M.C. General Hospital, Camberwell.

EPSLEY, A. J., Accrington, dispenser in the R.A.M.C.

EVANS, Bertie, son of Mr. W. P. Evans, Liverpool.

FORTUNE, Harold, chemist and druggist, Wigan, dispenser, Military Hospital, Dover.

HUMPHREY, Bernard (second son of Mr. John Humphrey, Ph.C., London), second-lieutenant in the Infantry.

JONES, F. (lately with Chave & Jackson, Ltd., chemists, Hereford), 6th Batt. King's Shropshire Light Infantry.

MADDOX, Lance-Corporal W. R. (lately with Chave & Jackson, Ltd., chemists, Hereford), R.A.M.C., South Wales Mounted Brigade (T.).

NEEDHAM, Private Leonard, chemist and druggist (formerly with Mr. Edward Carrington, chemist, Bakewell, Derbyshire), Grenadier Guards.

PARROTT, Lionel, chemist and druggist (son of Mr. J. Parrott, chemist, Richmond), Army Service Corps, Motor Transport.

SINCLAIR, William, chemist and druggist, Kelty, Fife, R.A.M.C.

Committee on Exportation of Rubber.

The Board of Trade have appointed the Lord Balfour of Burleigh, K.T., the Right Hon. Russell Rea, M.P., and Mr. Henry Birchenough, C.M.G., to be a Committee to consider and advise on all questions relating to the export of rubber from the United Kingdom and from British Possessions. The Secretary to the Committee is Mr. J. K. Grebby, to whom all communications should be addressed at the Westminster Palace Hotel.

Views from the United States.

The Washington correspondent of "The Times" has lately been somewhat despondent at the way that Germany is "educating" Americans about its cause and how well it is fighting. We are indebted to a West-end pharmacist for the following extracts from a letter which he has received from an English friend in New York, who appears to have leanings in the same direction:

"The American middle-class is exceedingly ignorant and badly informed concerning affairs European. The untravelled American is prone to judge foreign nations by comparison with the immigrants hailing therefrom; for example, the man in the street thinks Italy is represented by the Neapolitan scum which flocks to New York; similarly John Bull is looked upon as a mixture of fool and dude with a sprinkling of rascality. Now, Germany, recognising this ignorance, has undertaken a systematic educational campaign in this country. . . . This campaign of education has been very much overdone, and it is more or less resented by thinking Americans. Also it must not be forgotten that the Yankee is a much more sophisticated person than the European, and it seems to be taken for granted that in any controversy each side will overstate its case; consequently the German propaganda has received a liberal discount, apart from its merits.

There exists in this country a certain powerful section, strong politically on the Democratic side, and particularly in New York and Chicago, which is anti-English in all circumstances. This section, which was strong enough to break temporarily the Hay-Pauncefote Treaty, is, of course, pro-German, together with the Hearst publications. The least papers, which cover the U.S.A., are extraordinarily malicious, and lose no opportunity for mischief. Hearst is the prime jingo and sensation-monger of the U.S.A., greatly exceeding his titled English prototype for scurrilous journalism. Apart from the above organisation, American newspapers are very impartial, and they are undoubtedly doing a lot of real educational work.

I think Americans believe the German people to be thoroughly satisfied that they are fighting for their existence, which can only explain the immense sacrifices and heroism both on land and sea of the German nation as a whole. The American public knows, or thinks it knows, which amounts to the same thing, that Germans do not mutilate or torture their foes. There are millions of

Germans in the U.S.A., who form the highest type of citizenship, and no unprejudiced American is going to believe them or their kind capable of the horrible atrocities so frequently alleged. As regards the shelling of Scarborough and Whitby, the opinion seems to be that it is incidental to warfare, and nothing to kick about.

To sum up, with the above-named exceptions, American middle-class opinion seems to be almost entirely opposed to Germany. Not from sentiment, mind you, but altogether on account of the evidence. One of the biggest mistakes Englishmen make is that America is Anglophile. The 'Hands Across the Sea' stuff is non-existent on this side of the pond. The American aristocracy and travelled Americans are, I believe, entirely pro-Ally. Unlike the English aristocracy, however, they take no part in the Government, where the professional politician holds sway."

The British Government is not "out" for controversy with the German official press-agency, and we feel that Mr. Bryan's meticulously correct letter to Mr. Stone will have had more effect on Americans than anything which Whitehall might say.

Professor Uri Lloyd, of Cincinnati, writes to the "American Druggist" as follows:

SIR,—I hope and believe that I join in my hope all fair-minded patriotic Americans to the effect that when this war is over the end of militarism as a dominating factor in the world's movement will have been reached. In my opinion this military load is simply the business, as I look upon it, of a continuation on a large scale of the Robber Baron methods of former times. In my opinion, the military side of life is like the Old Man of the Sea in the beautiful allegory of Sinbad the Sailor. Turn to your "Arabian Nights," and read this story of Sinbad, and then think of the weight humanity has carried in this monstrous creature, militarism, that has, during the centuries passed, lived by drinking the life-blood of the people supporting it, and has then claimed that the misshapen thing itself has given to the people the opportunity of life. In my opinion, this allegory will be paralleled when staggering humanity throws off this oppressive weight. It seems to be as if this modern Old Man of the Sea, who up to this time has been wrapping his legs about his helpless carrier, has become drunken in the very height of his power, and it seems to me as though his hold will soon be loosened, as was that of the adversary of Sinbad. I have said enough, I take it, when such men as Professor Ostwald are called to take gun in hand to shoot a brother scientist, or in turn to be shot by a brother scientist. No further comment needs be made than that there should be an end of it all.

Leeches.

"The Star" publishes the following account of an interview with Mr. J. Watmore, of Potter & Clarke's branch at Viaduct House, Farringdon Street, E.C.:

The firm is practically the sole importer of the leech into the British Isles, and its chief sources of supply are France, Hungary, and occasionally Holland.

"When the war broke out," said Mr. Watmore, "we tried to get a few English leeches, but they were so ridiculously small and so expensive that we took no more. We supply all the hospitals, dispensaries, and wholesale druggists in the United Kingdom, and I have now orders for 15,000 to 20,000 leeches which I cannot supply. The war has absorbed all the male labour on the leech-farms of France, and things there are at a standstill. An application to Holland brought the reply, 'Owing to the war, unable to supply.'"

Modern applications have been found to dispense with the use of the leech in a number of ailments, but there are cases in which the application of the leech is still the best form of treatment. Great Britain uses about 100,000 leeches every year, and the retail price ranges from 3*d.* to 6*d.* each. Only recently, owing to the famine, a famous London physician paid 5*s.* 6*d.* for three leeches. The little blood-suckers are bred on farms where there is a continuous flow of water through sieves, and when they cannot pass through the sieves they are of a size fit for the market.

We may add that we have during the past ten days received information in regard to supplies from Holland. We have also learnt that leading West-end pharmacies have small supplies.

Personalia.

The friends of Corporal Valentine Hugill, despatch-rider in France, will be pleased to hear that he has sufficiently recovered from his serious accident to be able to take up his duties again.

Mr. Jack Elmitt, of the Sheffield Battalion, York and Lancaster Regiment (of G. T. W. Newsholme, Ltd.), has been gazetted second-lieutenant in the newly formed 9th Battalion of the Lincolnshire Regiment.

Men on Service.

Mr. Bertie Evans, second son of Mr. William P. Evans (Evans Sons Lescher & Webb, Ltd.), is the latest recruit to join the Colours from 55 Hanover Street, Liverpool. He has been learning the business at "56" for the last five years, but has felt it his duty to join the rest of the workers who have already enlisted. He has enlisted as a private in the O.T.C., and is now in training in London. His elder brother, Captain W. Sandford Evans, of the Welsh Regiment, is recovering from his wounds, but is still on sick-leave.

This is a portrait of Major Denis Saisse-Cavallier, head of the firm Cavallier Frères, essential-oil distillers



MAJOR DENIS SAISSE-CAVALLIER.

and perfume manufacturers, Grasse, France. He belongs to the Chasseurs Alpins. At the outbreak of the war he fought in Lorraine and the Vosges, and was present at all the principal actions. He is now at the Front in the North of France, fighting by the side of the British Forces. With his good knowledge of English, the gallant young Frenchman should find himself quite at home with them. For M. Saisse (who married Mademoiselle Cavallier, daughter of one of the founders of the business, shortly before the war) visits England periodically on business intent. He is well known to many in the drug and perfume businesses in England and our provinces. During the war he has been in many engagements, and has been promoted to the rank of major in recognition of his gallantry.

Lieutenant H. C. MacEwan, A.M.I.C.E., of the Royal Garrison Artillery, has been detailed for service in Gibraltar, having completed his armament training at Weymouth.

Mr. Robert Agnew Jamison, R.D., Hawthornden, Knock, co. Down, who has done good service to the Chemists' and



QUARTERMASTER JAMISON.

Druggists' Society of Ireland as an Hon. Secretary, joined the Ulster Division of the Royal Irish Rifles last September, and the photograph shows him in his Service uniform. Mr. Jamison is a son of Mr. William Jamison (Shaw & Jamison, 4 Townhall Street, Belfast), a member of the Council of the Pharmaceutical Society of Ireland, and he passed the statutory examination for registration in December 1891. Before the war he was an energetic member of the 6th Battalion East Belfast Volunteers, of which the 8th Royal Irish Rifles is composed. He has recently been made quartermaster of his battalion, and his colleagues of the

Chemists' and Druggists' Society have presented him with a tangible token of their appreciation of his patriotism. See *C. & D.*, January 9, p. 44.

The R.V. Hospital, Netley, Hants, is one of the finest military hospitals in the world. It has a corridor a quarter of a mile long, and its pharmaceutical service at present is efficient, if we may judge from the fact that this group



A NETLEY GROUP OF PHARMACISTS.

of dispensers acting there is composed solely of pharmacists. The two standing in the centre are Privates Abernethy and Sprott, of Kitchener's Army. In front of them are Sergeants Levy and Coulson; standing at the left, Sergeant Smith; and on the right, Sergeant Tidbury. The sergeants are all specially enlisted dispensers.

Mr. J. F. Haggerty, a former assistant with Mr. George Daniel, chemist, Wood Green, N., an extract from whose letter from the "Front" we published in the *C. & D.*, January 9, called at our office this week. Mr. Haggerty has been in the Queen's Westminster Regiment for six years, and on the outbreak of war volunteered for foreign service. His company went over to France early in November, but at the end of December he was invalided in hospital from septic poisoning in the foot. The heavy mud and constant wet were responsible for the damage to the boots, with the result that a neglected chafing on the foot became infected. After being in hospital in France, Mr. Haggerty has been sent home to recover fully before returning to his place at the Front. He has had several narrow escapes: once a bullet actually grazed the skin of the temple, and on another occasion a shell fell just in front of Mr. Haggerty, but fortunately it did not explode.



RIFLEMAN HAGGERTY.

Trading with the Enemy Act.

In the Shoreditch County Court on January 22, before Judge Cluer, Beck, Koller & Co., 43 City Road, E.C., agents for brushes, etc., sued R. Gorringer & Co., Brewery Road, for 15*l.* 13*s.* 5*d.* for goods supplied. The amount had been paid into court, and the question to decide was whether the plaintiffs were entitled to draw the money out and to recover their costs, in view of the Trading with the Enemy Act. Mr. A. H. Hinde, barrister, appeared for the plaintiffs, and Mr. L. Foulkes Jones for the defendants, who said plaintiffs held themselves out to be the sole agents for the British Colonies for Beck, Koller & Co., a firm of exactly the same name, in Berlin. The question was, if this money was paid, would the enemy in Berlin benefit? If they had held themselves out to be a branch of the Berlin firm they would have been protected, but they said they were an entirely different firm.

Judge Cluer pointed out that almost from the start of the war it had been possible for a foreign firm to sue.

Mr. Jones said it was so extraordinary that two firms of the same name should be different that they had thought it a public duty to bring the matter before the Court for decision, and asked relief from any costs incurred by so

doing. They had now been informed of a thing they never knew before, and that was that Mr. Gerhard Rahmstorf was actually the sole proprietor of the plaintiff firm.

Judge Cluer said he would amend the claim by putting in that name.

Mr. Jones said a person incurred a liability in paying an enemy in these days, and, although he did not want to hurt the plaintiff's feelings, he was an alien enemy.

Mr. Hinde: And that is just what the law says he is not.

Mr. Gerhard Rahmstorf then went into the box for cross-examination, and said he is now registered as a German. Besides the Berlin firm there is another one in Vienna of exactly the same name. He carried on his business in their name, it being necessary as he is agent for such a world-famous line of goods. They had nothing whatever to do with the profits on his business, however, although he had no document to prove it.

Mr. Jones: Then, if I went over and got the agency from Berlin, you could do nothing, as you have no document?

Plaintiff: Couldn't I? I have got the customers. (Laughter.) All goods had been paid for up to July 31, and he owed Germany nothing and had ceased to trade with them.

Judge Cluer said that as the plaintiff chose to trade in the same name as firms in Vienna and Berlin, the defendants were justified in being a little bit suspicious, but all the same he could not see that it was a good ground for refusing to pay. He considered the Legislature should make it an offence not to disclose who the person is that is trading in the name of a company. He could see no reason to deprive the plaintiff of his money or his costs, as the law stands, although he was perfectly sure no Englishman would be allowed to sue, let alone recover any costs, in Berlin. Judgment was then entered for the plaintiff, with costs.

Miscellaneous.

PRACTICAL AMERICAN SYMPATHY.—Fifteen hundred pounds of chloroform, many cases of serums and antitoxins, and thousands of yards of adhesive plaster and bandages for the Red Cross will leave New York for London on the steamer *Minnetonka*.

RELIEF FUND SUBSCRIPTIONS.—The contributions of the managers and employes of J. Savage & Co., Ltd., 4 Great Horton Road, Bradford, to the Relief Funds have been 10*l.* 13*s.* to the Belgian Relief Fund and 11*l.* 14*s.* to the Lord Mayor of Bradford's Fund, and not as stated in the *C. & D.* of January 23. These subscriptions are the result of weekly contributions, which are still going on.

AUSTRALIAN DOCTORS' WAR SERVICE.—Great sacrifices are being made by medical men in the war, both in Great Britain and her Overseas Dominions. Australia is contributing five field hospitals, and a rough estimate of the professional incomes of the officers of the force (including all below the rank of major), compared with their military salaries, suggests that approximately 34,000*l.* will be surrendered voluntarily by twenty-six men during the next twelve months. One well-known Victoria specialist has decided to go to the Front without any pay at all, and in excess of the authorised establishment.

INCOME-TAX AND TARIFF REFORM.—Speaking at the annual dinner of the Blackburn Chamber of Trade, on January 21, Mr. R. C. Walshaw, chemist and druggist, Huddersfield, President of the National Chamber, said many problems arising out of the war had been before the Chamber. In relation to war taxation, traders were convinced that, in proportion to their incomes, they paid far more rates and taxes than any other section of the community. They came to the conclusion, in discussing the matter, that the only equitable thing to do is to reduce the exemption figures in paying income-tax from 160*l.* to 80*l.* The only other alternative in the way of broadening the basis of taxation is Tariff Reform.

Belgian Refugees.

Apparently most of the Belgian pharmacists who have communicated with us with a view to employment in this country have now been suited. The callers and correspondents now seem to be mainly technical chemists, with pharmaceutical experience as an adjunct. Mr. J. Edmond Aps is still looking for some firm to whom his special knowledge of food-manufacture and analysis would be useful. He was eight years in the Oxo laboratory at Antwerp. A chemical-engineer, with special knowledge of agricultural and alimentary products, is also anxious to secure employment. He is Mr. A. Maquigny, and he speaks Italian, as well as French. Mr. R. Nolf, who has studied chemistry at Ghent University, and has had some experience in pharmacy, wants a situation as assistant in a pharmacy here. He speaks and writes English well. Mr. R. Van der

Capellen, from Hasselt, a pharmacist with twenty years' wholesale experience, has not yet found congenial occupation here. He knows English, Flemish, French, German, and Dutch, and would like a wholesale or retail berth with a view to Continental representation of British pharmaceutical products after the war.

Various offers of situations for refugee Belgians have reached us. In one case a firm wrote to ask us to put them in touch with a Belgian pharmacist who could superintend the manufacture and marketing of a pharmaceutical speciality they had in mind. We gave them one or two names, and doubtless satisfaction has resulted on both sides. So far, however, we have not yet come across a refugee with the necessary technical knowledge for making pocket flash-lamp batteries, as required by a Midland-manufacturing house.

From Canada we have an offer from a pharmacist of a situation for a suitable Belgian pharmacist in that country. The offer comes from Dr. Guy, St. Jean, Que., who is open to arrange for the "transport charges" of a competent Belgian pharmacist who speaks English and French.

(In THE CHEMIST AND DRUGGIST Supplement fuller details of those seeking employment are given.)

News from Austria and Germany.

BRAMBLE-LEAVES.—Of this tea-substitute about 50,000 kilos. have been collected in Austria. Experiments show that three or four minutes' boiling of the leaves with water gives a yellowish-brown drink of an agreeable taste, much resembling Chinese tea.

EAST PRUSSIA.—A Königsberg pharmacist has been ordered by the Government to make an inventory of the stocks of medicaments and surgical dressings in the pharmacies of East Prussia.—A beginning is to be made of the payment of compensation for damage caused by the war.

SPOILT-CHILD ATTITUDE.—The German Government has refused further co-operation in the work of compiling the International Catalogue of Scientific Literature, which was founded by the Royal Society in London. In consequence of this resolution the German Bureau of International Bibliography of Natural Sciences will be closed on March 31.

AN UNCERTAIN DATE.—At a general meeting of the Deutsche Pharmaceutische Gesellschaft on December 15, 1914, the Chairman (Professor Dr. H. Thoms) expressed the desire that the festivities on the occasion of the completion of twenty-five years' existence of the Society in 1915 should be combined with "a feast of triumph of the German arms." The Society has 1,187 members. The officers remained the same as in the preceding year.

FIGHTING AGAINST FATE.—The Generals of the German Army Corps in Alsace-Lorraine have issued an ordinance imposing greater restrictions upon the use of the French language in these two provinces. For instance, it is prohibited, under penalty of imprisonment, to use inscriptions and signs in French on shops, accounts, receipts, and commercial records must be in German. The tradesmen have even to do their bookkeeping in the hated language.

THE DEATH-ROLL.—The first issue of the "Pharmazeutische Zeitung" for 1915 contains a list of the names of pharmacists, physicians, and chemists who have been killed in the war and of those who have received the Iron Cross. According to this list, 6 military pharmacists and 97 other pharmacists, pharmaceutical assistants, and students, 117 physicians, 17 university professors and assistants, and 92 chemists have been killed. The Iron Cross was obtained by 95 military pharmacists and 95 other pharmacists, pharmaceutical assistants and students.

CULTIVATION OF MEDICINAL PLANTS.—In an article in the "Riedel-Archiv," 1914, the Director of the Pharmaceutical Institute of the Berlin University regrets that as yet Germany has not yet instituted the cultivation of medicinal plants upon systematic scientific researches, as has, for instance, been done in Austria. In many parts of Germany crude drugs are collected, and even cultivated, but nothing has been done to find out the best conditions for the growth of the plants so as to produce the largest proportion possible of active principles in them. Professor Thoms has made a beginning with these systematic researches by cultivating in the garden of the Pharmaceutical Institute opium-poppies, parsley, and peppermint. He states, for instance, that the Japanese mint-plant, which is not cultivated in Germany as yet, yields a volatile oil containing as much menthol as the Japanese oil. *Ruta graveolens*, *Chrysanthemum cinerariaefolium*, hamamelis, and some other drugs are cultivated in Dahlen now on a moderate scale. Professor Thoms urges that the wholesale drug-trade in Germany should co-operate, if possible, with the aid of the Government, to carry on a large experimental garden, in order to find out the scientific conditions for plant-cultivation.

Trade-Marks.

The figures in parentheses refer to the classes in which the marks are grouped, for a list of which, with particulars as to registration, see "The Chemist and Druggist Diary," 1915, p. 435.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. W. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

(From the "Trade-marks Journal," January 13, 1915.)

- "COLSORENE": for veterinary chemicals (2). By Crookes Collosols, Ltd., 109 Ladbroke Grove, W. 364,323.
- "INSTROL": for chemicals (2) and for medicinal chemicals (3). By Allen & Hanburys, Ltd., Plough Court, E.C. 364,992/3.
- "GOOD LUCK" over picture of horseshoe; for soap (2, 47, and 48). By J. Crosfield & Sons, Ltd., Warrington. 365,013/4/5. (Associated.)
- "QUOVO": for all goods (3 and 48). By H. Betten, 6 Montague Street, Worthing. 363,795/6.
- "AMPHERIN," for medicinal chemicals (3): "REMALCO," for food for infants and invalids (42). By E. H. Butler, New Haymarket, Leicester. 364,217/325.
- "FORMATABS": for medicine (3). By the Standard Tablet and Pill Co., Ltd., Hove. 364,397. (Associated.)
- "ABBEY": for syrups, pills, tablets, and balsams (3). By L. I. Akker, van Alkemadestraat 17-23, Rotterdam. 364,809.
- "ZANOL": for non-medicated surgical instruments, etc (11). By T. H. Stephens, 100 High Holborn, W.C. 364,997.
- "MOORLAND": for tablets, lozenges, etc. (42). By W. B. Cartwright, Ltd., Rawdon, near Leeds. 364,600.
- "POLARIS" on starry sky; for mineral and aerated waters, etc. (44). By H. V. Robinson, 221 Twyford Avenue, Portsmouth. 364,717.
- "GOLDEN STILL" BRAND: for a perfume (48). By J. Grossmith & Son, 29 Newgate Street, E.C. 364,063.
- "NILDÉ": for face-powder, etc. (48). By C. Davis, 24 Rue Chauchat, Paris. 364,592.
- "FASCINATION": for perfumery, etc. (48). By Tokalon, Ltd., 212-214 Great Portland Street, W. 364,732.
- "PORQUIL": for brushes (50). By D. Hayward, Ltd., Harrison Street, Bloxwich. 364,432.
- "POLIT": for a polish (50). By W. T. Bigsby & Sons, Morden Road, Mitcham. 364,637.

(From the "Trade-marks Journal," January 20, 1915.)

- "GANNET": for chemicals (1). By F. J. Folkard & Son, 114 Leighton Road, N.W. 364,838.
- "LADDER BRAND," with device of ladder and wall, for goods (1, 2, and 4); "SAFE BRAND," with devices of open and closed safes (Associated), for goods (2 and 42). By the Sizing Materials Co., Ltd., 21 Spring Gardens, Manchester. 364,506/7/9, 364,511/512/514/515.
- "PECROSYL": for all goods (2). By A. & M. Zimmermann, 3 Lloyds Avenue, E.C.; and Robert Gracser, Ruabon, North Wales. 363,295. (Associated.)
- "MALADINE" on label; for a medicine (3). By D. T. Jones, 88 Main Street, Mexborough. 364,910.
- "ORIENTINE," with device of hand bearing word "PURITY": for Fuller's earth (4). By G. Wills & Sons, Ltd., 3 Chapel Street, E.C. 364,782.
- "ORTHOLOID": for all goods (11). By A. E. Evans, 38 Fitzroy Street, W. 364,988.
- Device "S. LTD.": for disinfecting-apparatus (18). By Summerscales, Ltd., Beechcliffe, Keighley. 363,923.
- "DREADNOUGHT": for hot-water bottles (40). By the Lancashire and Cheshire Rubber Co., Horsemarket Street, Warrington. 364,110.
- Label device, "ROBINSON'S 'PATENT' BARLEY," etc.; for prepared barley (42). By Keen, Robinson & Co., Ltd., New Century Factory, Denmark Street, E. 356,524. (Associated.)
- "JUSTICE": for all indiarubber goods (40). By Tubbs, Lewis & Co., 29-30 Noble Street, E.C. 364,741. (Associated.)
- Oval device, with letters "E. & Co." in diamonds ("E. & Co." disclaimed); for caramel for colouring-purposes (42). By Everest & Co., 11-21 Northern Road, Plaistow, E. 362,931.

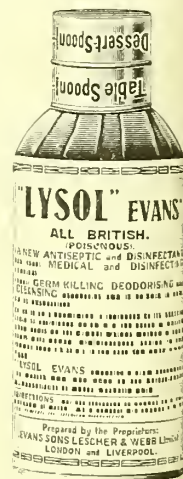
Our Town Traveller.

THE result of a number of calls made by our representative on metropolitan houses shows that "business as usual" has been the motto of all connected with the drug-business, but there has been, and there still is, much more of it than usual, and it has been carried through under exceptional difficulties as to labour, latterly accentuated by the new influenza that prevails in London.

Lysol (Evans).

Evans Sons Lescher & Webb, Ltd., Liverpool and London, informed Our Town Traveller that their Lysol

(Evans) has had a great reception from medical practitioners and chemists, and that they have been deluged with orders; "Lysol (Evans) is booming" was how the matter was put to our representative. The preparation is one of the best of the cresylic-acid type of disinfectants, and is pleasant in use. The manufacturers are liberally sampling medical men with it, and chemists would do well to be prepared for the demand that is sure to follow this. Lysol (Evans) is put up in oval ribbed bottles of brown glass, and is provided with an aluminium measure-cap suitably graduated. The general appearance is shown in our illustration. It is issued in five sizes, 4 oz. (7d.), 8 oz. (1s.), 16 oz. (1s. 9d.), 32 oz. (3s.), and 1 gal. (11s.). These are minimum retail prices. The wholesale prices are 4s. 6d., 7s. 6d., 12s. 6d., and 22s. per dozen for the first four sizes, and 11s. for the 1-gal. size.



Printing for Chemists.

The fine-art showcards submitted for the inspection of Our Town Traveller by Ford, Shapland & Co., Great Turnstile, London, W.C., are particularly rich and attractive in design and beauty of colouring. The firm are making a speciality of fine-art colour-printing, and since the outbreak of war and the cessation of German competition they have been kept very busy in evolving and printing new designs and types of showcards. The work covers a wide range, and is particularly applicable to the production of showcards for advertising toilet-preparations and other pharmaceutical goods. Our representative inspected some very fine specimens of calendars. Fine-art showcards are essential factors in modern selling schemes. Stand-up showcards are now increasing in popularity, and the most recent styles of these produced by Ford, Shapland & Co. have special lock stands. Four-page leaflets and single-page bills printed in colours on art paper from copyright photographs are another special feature, and have been found particularly valuable in dental advertising. A cheaper series of four-page leaflets is available. Inset-bills in great variety are also printed by the firm; they are well illustrated and printed. Ford, Shapland & Co. have also an extensive series of counter-bills for the winter trade, in which the illustrations are topical and attractive. Particularly pleasing in design and colouring are their shampoo-powder envelopes. For window-show the firm carry a large stock of bills in two sizes, 15 in. by 10 in. and 22 in. by 12 in. "Dummy" cartons and infants' food tins can be supplied to any design, also packing cartons, plain and in colours. These elegant containers increase the selling-value of preparations. A recent production of the patriotic type which deserves special mention is the Empire Eau-de-Cologne label, which is a most effective piece of colour-work. The centrepiece is the British lion couchant on the Union Jack, and the flag is flanked by views of the capitals of the Empire. The label is stocked in two sizes, and has proved an excellent seller.

Shop-fitting in War-time.

In the course of a visit to Philip Josephs & Sons, Ltd., 93 Old Street, London, E.C., Our Town Traveller gleaned some interesting points regarding shop-fitting in war-time. In August and September retailers seemed to await developments before placing their orders, and the shop-fitters had consequently a period of acute depression, during which, nevertheless, Messrs. Philip Josephs & Sons kept the whole of their staff employed. Towards the end of September, however, traders began to take up, and to see the possibilities of war-time business. This was particularly the case on the East Coast and other places in which large concentration camps for soldiers had been established, where traders, especially those engaged in the fancy trade, were doing an immense business. Shop-fitting orders were placed, and since that time Philip Josephs & Sons have been kept fully employed. In most cases Mr. Philip Josephs was able to say that the increased business had fully repaid the cost of the alterations. Asked particularly as to shop-fitting for chemists, Mr. Josephs was inclined to think that, in some localities at any rate, chemists had neglected their opportunities, but signs are not wanting that they themselves are beginning to recognise this, and several enquiries have recently been received from chemists desirous of refitting. Mr. Josephs pointed out to our representative that now is the time when it will pay the chemist to have alterations carried out, since, though the cost of materials has greatly increased, they are prepared to handle work at little more than the actual cost, as it is a matter of vital importance to them to keep their staff together. Further conversation elicited the fact that a shop-fitter must be specially trained to this class of work, and that some of the employes had been with the firm since boyhood. Then followed a tour of the showroom, where several wall-cases, serving-units, dispensing-screens, etc., were on view. Our representative was particularly struck with a large show-case of the "Silent Salesman" type, of which the firm make a leading line. Philip Josephs & Sons are specialists in the designing of shop-fronts, and some of the artistic signs seen by our representative not only showed the great advance that has been made in the past few years in this class of work, but also gave some slight indication to the lines on which the shop-fronts of the future will be designed.

Protecting Wholesale Traders.

Mr. Parkin S. Booth, of the Association of Manufacturing Chemists, Ltd., is what the Americans call "a wire." Our Town Traveller came across him one day last week, and got him to relate something about the new organisation of which he is the accountant. Mr. Booth while connected with a well-known trade-protection society was struck by the fact that whereas most important trades had their own special trade-protection office, the drug-trade had not yet attained that distinction. It is not difficult to see that the advantages are all on the side of a specialised office, because each trade has its own characteristics which, if not considered at the appropriate time, involve delay and additional expense to all the parties concerned. Mr. Booth speedily developed his idea of a special office for the drug-trade, and in conjunction with several of the largest wholesale druggists in London and the country, floated a limited company with directors conversant with the drug-trade. This association is now in full working order, with offices at Kimberley House, Holborn Viaduct, London, E.C., Nos. 35, 36, and 37 Exchange Chambers, 2 Bixteth Street, Liverpool. "What sort of work does the Association do?" asked our representative, and Mr. Booth handed him a brief statement from the front of the prospectus of the company as follows:

The functions are the recovery of overdue accounts, the collection and dissemination of information concerning the financial status of traders as a basis upon which credit may be granted or withheld, the representation of subscribers in insolvency cases, and the furtherance of any object that in the interests of the drug-trade should be promoted.

The last paragraph he was told covers the probability that Parliamentary action may at times be necessary in furtherance of the objects of the Association. The benefits of the Association are obtained by wholesale houses becoming subscribers. The subscription carries with it the right to make a certain number of status inquiries without further charge, and also the collection of accounts at a nominal fee. One of the most important functions, however, is the part which the Association takes in attending creditors' meetings and winding-up insolvent estates. "And what is the prospect of the success of the Association?" "Well," replied Mr. Booth, "I am being splendidly supported by the wholesale trade, but I shan't be satisfied until every firm has joined. The more members there are, the more efficient does the Association become in mutual protection." That is surely the right spirit to ensure the success of the Association.

Packed Specialities.

A visit to the factory of Shirley Bros., Ltd., packed-goods specialists, Whitecross Works, Rockingham Street, London, S.E., provided Our Town Traveller with just that information the retailer requires with regard to the most recent products of this firm. One of these is Angolopyrin, introduced to replace aspirin. It is put up in tablet form, is on the P.A.T.A. list, and is issued under a bonus scheme, of which Shirley Bros. give full particulars in their advertisements. The "White Cross" series of packed specialities associated with the name of Shirley Bros. is making steady progress. These are saleable goods, they are made in England, and are specially reserved for pharmacists. The "White Cross" baby-powder is one of the leading lines of the series, and is neatly put up in khaki-coloured dredger tins, the lettering being in chocolate, white, and red. "White Cross" tooth-powder is issued in two sizes, and is branded with the chemist's own name if desired. A winter article that should have a ready sale is a special menthol snuff in suitable boxes, with which a patriotic stand-up showcard is issued. A new method of packing boric powder, violet powder, and fullers' earth, which has proved very satisfactory, has recently been introduced by Shirley Bros. The sides of the containers are of rolled cardboard and the lids and bottoms are of tin. The effect when labelled and finished is excellent, the tin tops and bottoms giving the article a superior appearance. "Own name" ointment-tins form one of the main features of this business, a large and varied stock being carried. A special type of tin has been designed for small users, which has the retailer's name and address round the periphery of the cover, in the centre of which is a depression to which may be affixed the label bearing the name of the ointment. These labels are also supplied by the company, and in printing and general design they match the lettering upon the tin. Shirley Bros. have in preparation a new radium-applicator, which is in the form of a pillow that can be applied to any part of the body. For insomnia it is claimed that all that is necessary is to place the applicator under the pillow, when a refreshing sleep is assured. The applicator is guaranteed to contain radium, and not to be merely radioactive. On account of its cost the applicator will not be sold outright, but will be hired out at 2*l.* 2*s.* for six months' use. Chemists are to act as agents for the applicator, and are invited to apply to the company for terms, etc. Under the guidance of Mr. Shirley the C. & D. man made a tour of the factory. The manufacturing laboratory is on the ground floor, and above this are the stock-rooms and packing-departments, which take up several floors. On the top floor a number of girls were engaged in packing a variety of tooth-powders; the packing of toilet-preparations, ointments, emulsions, etc., was also witnessed, the factory being a veritable hive of industry. All card-lacing is done on the premises, and a number of girls were seen engaged in this occupation. In the course of his tour our representative observed a new type of health-salt tin, which is absolutely airtight. The tins are filled from the bottom, which is then spun on by special machinery. Under the lever lid is a tin cover, really part of the tin, and until this is cut through the salt is well protected from damp.

Fine Chemicals.

"If you have a copy of THE CHEMIST AND DRUGGIST published about Christmas-time twelve years ago, and containing a letter by Dr. Martindale on German chemicals, please send me one."

This request in the natural course found its way to our Editorial department, and search revealed the fact that the letter referred to was published in the *C. & D.* of December 27, 1902, and, none of the issue being in stock, a copy of the letter was made. Here is the substance of it, the letter having been written in consequence of Mr. John C. Umney's regret in regard to the long delay in granting use of duty-free alcohol to manufacturers:

"Chemicals of every description are imported into this country to an enormous extent from abroad, and sold by chemical dealers or agents as if they were of British manufacture; and in the face of German competition, favoured as it is by spirit laws which encourage rather than discourage chemical-manufactures, it is imperative that there should be a steady and continuous demand for British-made chemicals, particularly as at the present time there is such a marked outcry of slackness of trade. I think the medical profession might assist British chemical-trade by a simple expedient, such as by placing some small recognised mark—*e.g.*, 'B.O.' (signifying 'British Only')—in the corner of their prescription, which would encourage, if not compel, the dispensing-chemist to compound that prescription with chemicals of British manufacture. The dispensing-chemist would then find it necessary to write to his 'agent,' saying that he had a demand for British chemicals, and the agent would set about converting his warehouse into a factory for producing chemicals of his own manufacture. This would result, firstly, in it being worth while for the manufacturer to employ skilled chemists for research-work (the preliminary to as well as the accompaniment of manufacture), just as on the Continent; and, secondly, the exclusion from our stocks of the thousand-and-one German proprietaries with fancy names and tasteful labels would follow. As bearing upon this, I may state that I have examined many recent prescriptions on our books, and find that an enormous proportion of them were for German proprietaries and chemicals which had undoubtedly been manufactured abroad. Chemists simply do not recognise the hold that German chemicals are getting on British trade. I would ask your readers to consider the hundreds of chemicals which are manufactured solely in Germany. It is not that British chemists do not possess the knowledge, but that fiscal difficulties have in many instances driven our manufacturers out of the market; consequently the demand for British chemicals has been so discouraged as to amount to preference for the foreign article. I feel strongly that the support of dispensing-chemists and prescribers is necessary for the success of any movement on the part of manufacturers and wholesalers to promote internal chemical-industry, also that Colonials would do great service by using 'B.O.' on all their indents. I am fully aware that the suggestion is, at present, somewhat visionary, but there can be no two opinions of the statement that something ought to be done to support home industries."

These sentiments being no longer visionary, our Town Traveller hied him to 10 New Cavendish Street to learn what Dr. Martindale has to say about the matter now—above all, what he is doing about it. Our representative learnt that he has not been idle, the new edition of the "Extra Pharmacopœia," notwithstanding, the final proofs of which are going through his hands. Since the outbreak of the war Dr. Martindale has been engaged in developing the manufacture of a number of chemical products, hitherto imported, and this has grown so, that a new factory is being added to the William Martindale establishment. This will permit a greater output of fine chemicals as well as galenicals and other Martindale specialities.

B.P. Lozenges.

On the occasion of Our Town Traveller's call on Jules Denoual & Co., Carlton Works, Asylum Road, London, S.E., Mr. Desnos, the proprietor, under whose guidance our representative had an opportunity of inspecting all the departments of the factory, had some interesting things to say in regard to the lozenges of the new Pharmacopœia. In answer to a question, prompted by the operations going on in the pastille department, Mr. Desnos stated that the lozenges of the old B.P. are

no longer in demand, and he is now busily engaged in turning out the lozenges of the new Pharmacopœia. Speaking from the point of view of the manufacturer, Mr. Desnos gave it as his opinion that some of the new formulas for the official lozenges contain rather too much gum, which has the effect of making the mass tough and not readily workable. The difference in colour of some of the official lozenges when made by different makers is a matter which Mr. Desnos has found to give retailers a little trouble. He explained that this is due to the difference in the black-currant paste employed. The B.P. merely indicates "black-currant paste of commerce," and this is not always what it should be. Mr. Desnos makes his own black-currant paste from the fresh fruit, which is crushed and the juice concentrated to a thick paste. Much of the black-currant paste of commerce, however, contains a great deal of added sugar, and consequently retains a much greater quantity of water. The amount of water retained has also some bearing on the amount of gum that is necessary. The fact that the mass made strictly according to the B.P. is tough and difficult to roll out adds to the expense of producing the lozenges, as they require more manipulation, and the operator is unable to turn them out at the ordinary rate. Mr. Desnos also explained another point that frequently perplexes chemists. Many of the lozenges of the new Pharmacopœia are smaller than formerly, but they are sold at considerably higher wholesale rates. This is because, being smaller, a greater number of them go to the pound, and as each lozenge contains, in most cases, very nearly the same quantity of active ingredient, the amount of the latter per lb. is increased and the price of the lozenge must be proportionately raised. Further, since the lozenges are smaller, the cost of labour is increased in proportion to the extra work involved. Before leaving the pastille department, Mr. Desnos mentioned that had our representative called a few weeks later, some new machinery which will largely increase the output of this department would have been in position and available for inspection. Passing through the offices on the right of the entrance, and the perfumery department still further to the right, the first floor was reached by a stone staircase. This floor is the packing and despatch department, and is divided into divisions for the various products. The printing department is on this floor. Ascending to the next floor, the capsule department was reached. Here hydraulic presses were turning out perfect capsules at a marvellous speed, and in one room a number of girls were engaged in filling and sealing hand-made capsules, for which there is still a steady demand. The method adopted shows considerable ingenuity, and enables the work to be carried out very rapidly. Ascending higher, the rest of the building is practically entirely devoted to lozenge, pastille, and tablet making, and our representative inspected some of these in various stages of manufacture. On again descending to the ground floor, the essential-oil and perfumery departments were inspected, and the large stock of Tasmanian eucalyptus oil, for which the firm are sole agents, gave some indication of the business done. Finally, it may be mentioned that on account of the war Mr. Desnos has been asked to supply a great number of tablets, capsules, etc., formerly produced in Germany, including hard gelatin slip-on capsules

Maw's Specialities.

Believing that a visit to the showrooms of S. Maw Son & Sons would elicit some information of more than ordinary interest to followers of "Maw's Page," our Town Traveller called at the House of Maw in Aldersgate Street, London, E.C., where, under the guidance of Mr. Porter, the manager, he had the opportunity of examining a full range of specialities, old and new manufactured by this firm. The conversation turned first on "Maw's Page" of the *C. & D.*, and the "Parex Pageant" now appearing there. Mr. Porter informed our representative that the "Parex Pageant" will form a comprehensive illustrated review of the whole of the "Parex" series of toilet and surgical preparations. The "Pageant" was originally organised to appear last summer, but owing to the outbreak of war it was felt

that it was necessary to cater for the needs of the moment, and "Maw's Page" was fully taken up with topical "war" lines. On January 9, the "Pageant" was commenced with "Parex" Talcum Powder, and the other "Parex" pages so far issued are: "Parex" Enemas (January 16), "Parex" Indiarubber Hot-water Bottles (January 23), and, in the present issue, "Parex" Tooth-powder. When we mention that the "Parex Pageant" will fully occupy "Maw's Page" until Easter, our subscribers will gain a good idea of the extent and growth of the series.

One feature of these specialities is the protected profit-and-bonus scheme maintained for the benefit of the retailer, and the series is therefore of particular interest to the pushful chemist. The series was started with "Parex" Indiarubber Hot-water Bottles; these are double-seamed, fitted with non-leaking nickel screw-cap, are guaranteed of British manufacture, and there are fourteen sizes to select from. This was followed by "Parex" Tooth-powder, which is put up in 1s. tins at 6s. per dozen, with a bonus of one tin per dozen, or one and a-half dozen tins per gross. Then came "Parex" Violet Powder and "Parex" Talcum Powder, at 6s. 6d. per dozen, with similar bonus terms. Another line is "Parex" Enemas, seamless and sterilisable; the fittings of these are of toughened glass, and when not in use are held by clamps to the bottom of the box. The tin boxes are well enamelled, and all reference to the contents is eliminated from the outside. The price is 32s. per dozen. Other specialities of the series are: "Parex" Shampoo-powders in triangular packets at 7s. 9d. per dozen (portions of seven packets, or in loose packets at 12s. 6d. per gross); "Parex" Crystallised Brilliantine in glass containers of special design at 7s. per dozen; "Parex" Tooth-paste in similar containers at the same price; "Parex" Breast-reliever with red rubber bulb, 2-oz. capacity; "Parex" Throat and Nose Spray, for thick mucus and aqueous solutions; and "Parex" Safety Razors. The last-mentioned are British-made (as, in fact, are all the goods sold under this brand), and may be had silver-plated or gold-plated. The latter call for special mention as a really saleable line. They are of the best material, look well, and are beautifully got up in metal-snap cases, lined and leather covered. They cost 8s. 3d. each. The companion line is the "Parex" holder for stropping safety-razor blades, ingenious but simple in design. It takes all Gillette pattern razor blades, and with it can be obtained that desirable velvety edge which no automatic stropper can produce. The price is 9s. per dozen. Goods issued under the "Parex" brand bear the registered triangular design of the firm. The toilet-preparations are well compounded and pleasantly perfumed. Great care has been taken in designing the labels, etc., and colour-schemes of which are simple yet effective. The general get-up is such as to create an atmosphere of distinctiveness in any pharmacy. Advertising-matter of a very varied character, including stand-up show-boards, window-slips, and counter-bills, is provided. S. W. Son & Sons have also a series of carbolic tooth-powders in red and pink enamelled tins, 1s. size at 5s. 6d. per dozen, and 6d. size at 3s. 6d. per dozen. Other trifles are provided, and among other novelties selected were "Four Star" Eau-de-Cologne; a new flat-warmer, made of copper, which sells at 4s. 6d., plush lined 1s. extra; service foot-powder in khaki tins, taping machines, the Santora Sputum Flask, and the "Reform" transparent rubber teething-pad (3s. per tin), all of which are worth attention. Should any reader follow these notes up by a visit to "No. 11," he will find it well made a point of inspecting the new optical department.

RUSSIAN KELP.—Large quantities of iodine-yielding seaweed are found in the Black Sea in the triangle formed by the mouth of the Danube, Sebastopol, and Odessa. The weed is from 30 to 50 metres under the surface of the water, and two or three tons can be readily secured in an hour. It has been found that the quantity of iodine obtained is sufficient to warrant exploitation.

Insurance Act Dispensing.

A Record of matters concerning Chemists' interests in the National Health Insurance Acts.

A Doctor Removed from the Panel.

THE Insurance Commissioners, after holding an inquiry with reference to Dr. A. J. Rollinson, Sheffield, are satisfied that his continuance on the panel would be prejudicial to the service of the insured, and have therefore directed the Clerk to the Committee to remove his name from the list forthwith.

Complaint against a Hampshire Doctor.

A COMMITTEE appointed by the Insurance Commissioners held an inquiry at the offices of the Hampshire Insurance Committee at Winchester on Monday, January 25, into a complaint brought by an insured person against Dr. Henry Lewis Grant, of Eastleigh. Mr. John Fischer Williams, barrister-at-law, officiated as Chairman, and the other members of the Committee were Mr. E. K. Le Fleming, M.R.C.S. (Eng.), L.R.C.P., and Mr. John Wallace, M.B., C.M. Mr. Henry White, jun., Clerk to the Hampshire Insurance Committee appeared for that body, and Dr. Grant was represented by Mr. Chas. Lamport (Messrs. Lamport, Bassitt & Hiseock), of Southampton.

At the outset of the inquiry Mr. Lamport applied for an adjournment, as his client had not been able to arrange for the attendance of two witnesses. Owing to the gravity of the matter for Dr. Grant, he applied that the Committee might take the inquiry at its next sitting.

The Chairman intimated that the Committee was unable to consent to the application, as that was a special sitting of the Committee, the members of which had come together from all parts, and moreover there had been given more than a month's notice of the meeting.

Mr. White outlined the case for the Insurance Committee, and announced that, owing to the exigencies of military service, the original complainant was not present, although every effort had been made to secure his attendance. The principal witness was therefore the wife of the complainant. The facts to be placed before the Committee were in respect to Dr. Grant's conduct at Eastleigh on June 9 and 10. It was alleged that Dr. Grant was asked to attend a panel patient on June 9, but he did not call that day, and on the following day the patient's wife saw him in the street and spoke to him, when he gave her a blank prescription-form bearing his signature. Later he attended the patient's house worse for drink.

The first witness was Kate Haskett, the wife of Louis Haskett, riveter, 190 Southampton Road, Eastleigh, who spoke to going to Dr. Grant's surgery on June 9 and telling him that her husband was very ill. He said, "All right," but did not attend that day. On the following day she was going for him again, and met him in the street. She asked the doctor what he thought of himself, and he put his hand in his pocket and gave her a piece of paper (the prescription-form), which he told her to take to the chemist. She declined to do so, as he had not seen her husband.

For Dr. Grant, it was admitted that the blank prescription-form was given.

Witness, continuing, said that later Dr. Grant came to the house, and complained that he had only one eye. He staggered up the passage, and in the bedroom sat on the arm of a chair by the side of the bed. She asked him to stand up in order that she might turn the chair round, and he fell across the bed. He got up, and after speaking to her husband said he would give him a paper for the hospital. When asked about certificates to go on the club, the doctor said they would have to pay for them. He then started "bringing up old grievances" about her husband years ago, and before leaving said, "You are the biggest rogue and the biggest — liar in Eastleigh." As he was leaving the house he called witness a beast.

Mr. White: What was the doctor's condition on this occasion?

Witness: He was the worse for drink.

In cross-examination, witness said she knew Dr. Grant was of an excitable disposition, and there had been a little trouble between them before.

Mrs. Rogers, who resided at the same house, corroborated as to Dr. Grant's words.

Wm. Jas. King, sick-visitor of the Oddfellows' Society, spoke to visiting Haskett on the following Friday, when, in his opinion, he was very ill.

This closed the case for the complainant.

Mr. Lamport, for Dr. Grant, said his client had been in Eastleigh for twenty-five years, and he was a man of excitable temperament. He denied that he was in any

degree intoxicated, and he honestly thought it better that he should not attend Haskett, as he did not see any necessity for it. He told him frankly to go to another doctor, or offered to send him to the hospital.

Dr. Grant gave evidence denying that he was intoxicated, and stating that he attended other patients on June 10. He made a superficial examination of Haskett, and suggested that he should go to the hospital in order that he would be convinced that there was nothing the matter with him. In cross-examination, Dr. Grant would not admit making use of the exact words alleged, but explained that he had a sensitive nature and was apt to give repartee when perhaps he should not. If he had done so, he apologised, but he could not remember.

Replying to the Chairman, witness said, although he called at two public-houses to visit patients, he had nothing to drink there. His honest belief was that Haskett was malingering.

In re-examination, Dr. Grant said that no accusation was made against him on June 10 that he was drunk.

Mr. Alfred Charles Miller, registrar of births and deaths and vaccination officer, stated that he saw Dr. Grant at 11.25 and again at 1.40 on June 10. He was in no way the worse for drink. He was of an excitable disposition.

At the close of the evidence the Chairman intimated that the Committee would make their report to the Insurance Commissioners in due course.

Reports from Local Centres.

With special reference to the supply of medicines and appliances. See also Winter Session.

ENGLAND.

Birkenhead.—According to a report presented to the Insurance Committee, the payments to the panel chemists in 1914 amounted to 3,800*l.* 3*s.* 1*d.*

Dewsbury.—The Medical Benefit Sub-Committee reported to the Insurance Committee on January 14 that the Pharmaceutical Committee had objected to doctors on the panel dispensing for insured persons in certain areas, and the Clerk had been instructed to obtain from the Commissioners a clear interpretation of the Medical Benefit Regulations in regard to the matter. The Sub-Committee also reported that there are twenty-one chemists on the panel.

Essex.—A recent report of the Panel Committee states that the question of the use of "Rep. mist." is still under consideration. Such prescriptions will continue to be used for the present, but a Sub-Committee of the Panel Committee is to prepare a local Pharmacopœia, with the object of removing the difficulties. The report states that there appears to be a possibility of an Insurance Pharmacopœia for the United Kingdom. With regard to the work of the Joint Drug Committee, the report continues, a searching scrutiny of prescriptions has been carried out, and the suggestion of the Secretary of the Panel Committee of writing privately to practitioners has been sanctioned, in the hope of reducing both the labour involved and the deficit in funds in future. The Panel Committee has advised the Insurance Committee to disallow all private formulæ and all small local Pharmacopœias, as it is impossible to price them or check the prices.

Liverpool.—At a meeting of the Panel Committee on January 15 (see *C. & D.*, January 23, p. 52) a letter was read from the Secretary of the Insurance Committee complaining that no notice had been sent to his Committee of the alleged agreement between the local medical and pharmaceutical bodies that medicines should be dispensed according to the B.P. 1898 until March 31, 1915. The Committee took exception to the "misleading nature" of the statement in the circular issued by the Pharmaceutical Committee (*C. & D.*, January 9, p. 52), stating that the Panel Committee had agreed to the abolition of "Rep. mist." The Secretary was instructed to draw the attention of the Pharmaceutical Committee to the matter.—The "Liverpool Daily Post" publishes this week an interview with a leading local chemist, bewailing the fact that panel chemists are only to receive 75 per cent. of their accounts for 1914. It states that there is a deficit on the year's working of 25 per cent.—i.e., 5,000*l.* For the work entailed by Insurance Act dispensing, it is stated, there is no profit. About half a column is taken up by matter in a similar strain. Another day an article published reviewed the doctors' position. Instead of receiving their usual cheques, doctors have only got a little over half their usual amounts—1*s.* per head for the quarter, instead of 1*s.* 9*d.* per head. This is due to the war, so many insured persons having gone to serve with the Colours. By those persons who are in a position to judge it is estimated that the "actual discounting" of chemists' accounts in the Liverpool area will be not more than 12½ per cent. for the whole year.

London. The Pharmaceutical Committee met on January 19, Mr. John Keall (Chairman) presiding. The Finance Sub-Committee submitted a complete statement of expenses up to January 31, 1914, showing that the expenditure was considerably less than the amount estimated. The Secretary was directed to call the attention of the Insurance Committee to the action of a doctor in making invidious comparisons to his patients regarding appliances supplied by two chemists. The Committee expressed regret that complaints had again been received regarding the supply of abnormal quantities of drugs, etc., when the doctor failed to specify any quantity. With a view to expediting the payment of chemists' accounts, it was agreed that all accounts received by the Insurance Committee more than seven days after the end of each month shall be held over for inclusion in the succeeding month's accounts. A Sub-Committee, consisting of Messrs. Keall, Jenkin, Skinner, Hatfield, Fairweather, Bolwell, and Brumwell, was appointed to confer with representatives of the Panel Committee in regard to the question of "Rep. mist." The Chairman stated that the work of the Checking Committee is proceeding, and it is hoped to have in February a statement regarding the prescribing in January 1915.—The Insurance Committee met on January 23, after this section of the *C. & D.* went to press. The Finance Sub-Committee reported that the amount available for the 1914 Drug Fund will be about 75 per cent. of the accounts furnished to the Committee, and that the estimated deficit will be approximately 46,000*l.* The Medical Benefit Sub-Committee recommended that chemists' accounts for the month of January 1915 be paid in full. The report of the latter Sub-Committee stated that the names of three dispensing contractors and one non-dispensing contractor had been added to the panel list, while the names of nine persons had been removed from the list during December 1914. The Medical Service Sub-Committee reported that five complaints against doctors had been investigated, four of which had been substantiated. The report of the Pharmaceutical Service Sub-Committee stated that they had inquired into a complaint against a chemist that a small quantity of an emulsion had been supplied to an insured person than the doctor ordered. The chemist's defence was that he did not have sufficient in stock at the time, but had since supplied the full quantity. The Sub-Committee was not wholly satisfied with the explanation, and recommended that the attention of the chemist be drawn to the fact that it is essential that prescriptions presented to him should be accurately dispensed.

Manchester.—On January 23 a letter was sent out by the Pharmaceutical Committee to every chemist on the Manchester panel calling attention to the deletion of aqueous tinctures from the Tariff, because of the guarantee inserted opposite them. Although deleted, these aqueous tincture if ordered by a medical man, must be supplied and charged for as non-Tariff drugs. Notice is also given that the special drug-form (Med. 39) is now discontinued, the supplementary Tariff having taken its place from January 1914. It has been decided that prescriptions for private formula will not be passed for payment by the Committee, and prescriptions which have been altered in any way (unless initiated by the doctor writing the prescription) may be disallowed. Manchester panel chemists are also informed that, in addition to their usual monthly payment, they will shortly receive a payment from the Insurance Committee which will represent 75 per cent. of their total account for 1914, also that this is not the final payment; a further payment will be made, the exact amount of which cannot yet be ascertained owing to the following reasons: (1) The final amount to be credited to the Drug Fund has not been received yet from the N.H.I. Commissioners; (2) the amount of money to be transferred for Sanatorium Benefit prescriptions is not definitely known; (3) the exact amount of surcharges for 1914 has not yet been arrived at. The Pharmaceutical Committee also state that they feel the result of the past year's work to be very satisfactory, considering the state of other areas. The early months of 1914 were hopelessly insolvent, the special arrangements for checking extravagance not being in full working order until after the end of the first quarter. The later months have been much better and solvent, but unfortunately there was not sufficient of a surplus to clear off the enormous deficit of the first quarter of the year. The prospects for 1915 the Committee state, seem to be fairly satisfactory, unless the extra charges on the Drug Fund, due to war price cause a deficiency.

Salford.—At a meeting of the Insurance Committee on January 21 the Clerk reported that during December 1914 25,762 prescriptions were dispensed at an average cost 4.7*d.*; for the same period 13,484 insured persons received treatment, the average cost of drugs per patient being 9

Sheffield.—The Panel Committee, while agreeing to omit *nist. tussi rub.* on the ground of non-stability, do not see their way to withdraw their resolutions with regard to *tock mixtures*, and ask for a list of eight mixtures to be adopted. They add that the position is none too certain or 1915, and it is felt that the position should be given a trial for a few months (from February 1), and it would then be possible to get some idea of the state of the Drug Fund, and if the position were found satisfactory it is very probable that the list would be withdrawn. A joint conference is being held of the Panel, Pharmaceutical, and Insurance Committees to decide on joint action to be taken regarding the large number of capitation grants withheld from insured persons.

Surrey.—The Finance and General Purposes Committee's report presented to the Insurance Committee on January 23 stated that the Sub-Committee had sanctioned payments to chemists of 90 per cent. of the amounts of their accounts for the month ended December 11, 1914 (557*l.* 7*s.* 1*d.*) and the period ended December 31, 1914 (610*l.* 14*s.* 10*d.*).

West Hartlepool.—The Pharmaceutical Committee has completed its investigation of the 1913 prescriptions, and has presented its report to the Panel Committee.

SCOTLAND.

Aberdeen.—The Medical Benefit Sub-Committee has approved of a report relative to the conference held between representatives of the Sub-Committee and the Pharmaceutical Committee for the purpose of considering the terms on which the chemists were prepared to renew their agreements for 1915. According to the report, it was agreed that the position of panel chemists in Aberdeen is anything but satisfactory. The 1913 accounts had been discounted to a considerable extent, and, in view of largely increased prescribing during the first quarter of 1914, it is likely that discounting will again take place. The chemists were desirous, before deciding to take service for 1915, of obtaining a guarantee that their accounts would be paid in full. The Insurance Committee, while fully in sympathy with the chemists in the matter, cannot give such guarantee. It was decided to communicate the chemists' views to the Commissioners, and to ask them for information as to further credits to the Medical Benefit Fund.—A firm of fishmongers as applied to be placed on the panel, as they are in the habit of supplying cod-liver oil and c.l.o. emulsion to doctors' prescriptions.

Perthshire.—A joint meeting of the Local Medical Committees for the County and Burgh of Perth was held on January 15, when it was decided to agree to a grant being made to the County and Burgh Pharmaceutical Committees for administrative expenses, provided that the panel Committees are conceded the right of auditing the accounts for such expenses and that the accounts are duly audited by the Commissioners. It was also resolved that, adding from the known expenditure of the Panel Committees, it would appear that the estimate of expenses submitted by the Burgh Pharmaceutical Committee is excessive. It was decided to recommend that, as the Panel Committees are not convinced that practitioners are likely to derive any benefit from the Central Prescription-checking bureau, no payment be made towards the expenses of the bureau by practitioners in the two areas.

Roxburghshire.—The Panel Committee recently decided not to nominate a candidate for the Drug-accounts Committee in connection with the Central Prescription-checking bureau, of which it disapproves. In the event of an action being necessary, however, the Chairman was empowered to vote in favour of a suitable candidate.

WALES.

Flintshire.—The Insurance Committee on January 21 decided to advance 18 per cent. of the chemists' claims for the quarter ended December 31, 1914, making the payments for the year 81 per cent.

Glamorgan.—A joint meeting, consisting of six members of the Glamorgan Insurance Committee and three each from the Panel and Pharmaceutical Committees, was held at Cardiff on January 19. Mr. Noah Pullin in the chair. Mr. Eynon Lewis, Clerk to the Insurance Committee, was present. The object of the meeting was to consider the position of the Drug Fund in 1914, and to determine the means to be adopted to reduce the deficit of 3,000*l.* A suggestion was made that doctors who had exceeded the amount allotted in respect of each insured person should be charged the amount of their excess. It was, however, decided that the machinery of Article 40 of the Regulations should be set up, that the three bodies concerned should each contribute equal proportions towards the cost of an investigation, and that the scrutiny should be conducted under the supervision of the Committee's accountant.—The following day, January 20, the Pharmaceutical Com-

mittee met under the chairmanship of Mr. Griffiths (Maesteg), and assented to the proposals of the Joint Committee. The Secretary was instructed to forward to the Insurance Committee a resolution to the effect that arrangements should be made for a monthly analysis of prescriptions, pending the establishment of the National Welsh Checking Bureau. The Secretary was also instructed to ask that chemists' accounts be paid in full monthly, the adjustment to be made quarterly. Reports from the chemists of the county show that since the commencement of the year prescriptions have advanced both in price and number, and the Secretary was instructed, in view of the number of insured persons who have joined the Forces, with a consequent reduction in the Insurance Committee's income, to bring the matter to the attention of the Committee. It was also resolved that the Secretary communicate with other mining and industrial areas which have suffered from discounting, with a view to joint action being taken.

Minor Experiences.

Second Day at Edinburgh.

On the last day of the old year I received word to present myself for my oral examination at York Place at 1.30 p.m. precisely on January 6, 1915. When I got there I had to wait until nearly 2 p.m. while the examiners lunched. Once inside I had not long to wait, my first subject being CHEMISTRY, Dr. Coull being examiner. After taking me over the first day's work, he asked me if I knew how copper is obtained from its ore? How to prepare copper sulphate? Molecules of water present in copper sulphate, in Epsom salts, B.P., and in alums? Manufacture of soaps: use of brine in soap-manufacture. Glycerin: how prepared? Manufacture of chloroform and amides. Preparation of acetamide and phenyl acetamide.

I next proceeded to Mr. John Gilmour for PRESCRIPTION WRITING AND READING. Here I had about a dozen prescriptions to read, with detection of overdoses. I was asked, among others, the doses of *tr. cannab. ind.*, *tr. calumbæ*, *tr. belladonnæ*, *succus belladonnæ*, *succus hyoscyami*, *succus conii*, *pulv. kino co.*, *pulv. opii co.*, and *tr. nucis vom.*

BOTANY was my next subject. I had to recognise a tangential longitudinal section of the pine-stem. Compare two flowers given (*Ranunculaceæ* and *Liliaceæ*). Identify, among others, yew, *Juniperus communis*, Scotch fir, rosemary, lavender, and Christmas rose. Xerophytes: where likely to be found? Structure of stem, and why? I was next shown a collection of fruits, and asked particularly about the fig.

I then proceeded to MATERIA MEDICA with Mr. Stephenson, and was shown *Strophanthus Kombé* for recognition: principal ingredient? What is a glucoside? What is an alkaloid? Alkaloids in belladonna, aconite, and ipecacuanha? Are the alkaloids in belladonna chemically related? I next had to recognise, among others, valerian-rhizome, soap-bark, coca-leaves, digitalis-leaves, spermaceti, hard paraffin (how obtained?), and aconite (which is the best aconite?).

After sitting for ten minutes I was sent to my last subject, PHARMACY (Mr. Meldrum). Here I was asked, among other things, preparation of hydr. am. chlor., hydrarg. perchlor., liq. arsenicalis, the use of *tr. lavand. co.* in it, B.P. soaps? Is carron oil a saponification or an emulsion? What is an emulsion? Best emulsifying-agents? Preparation of chloroform and B.P. chloroform solutions? Preparation of *tr. camph. comp.*, *spt. æther. nitrosi*, Liebig's condenser: its uses, and how to manipulate it? Water-bath: its uses, etc.

This finished my subjects, and after a few minutes the Chairman congratulated me, and I now find myself qualified to sell poisons within the meaning of the Act.—*Semper Vigilans* (222/45).

FEW LEPER-HOUSES were founded in England after the thirteenth century, and in the fourteenth century the English leper-houses were being closed for lack of patients, and their funds diverted to other uses.

"FOUR MARKS."—On board the troopship *Deseado*, en route to —, all men were advised to be vaccinated. Three or four days after, when the arms were taking well, the following conversation was heard between two privates of different battalions of the same regiment: "Bill, I see tha's gotten four marks on thy arm and I've nobbut three." "Ay, tha knows, I belong to th' 4th Battalion, and we've all gotten four marks on us arms." "I'll tell you what it is, Bill; it's a dashed good do we don't belong to th' 10th Battalion!"—*Manchester Guardian*.

Births.

Authenticated notices are inserted without charge.

HAWTHORNE.—At Shore Street, Hollywood, on January 24, the wife of G. W. Hawthorne, Ph.C. (Ireland), of a son.

PEARCE.—At Wharnccliffe, Paignton, on January 20, the wife of Stanley L. Pearce, chemist and druggist, of a daughter.

Marriages.

Authenticated notices are inserted without charge.

DUDLEY-JONES.—At St. Peter's Church, Athlone, on January 14, by the Rev. J. F. Anderson, Guilford, Donald Dudley, third son of Mr. G. C. Dudley, Dollymount, Dublin, to Edith Emily, second daughter of the late Robert Jones, chemist, Cavan.

FRANKLIN-BEVINGTON.—At St. Botolph's Church, Bishopsgate, London, E.C., on January 21, Harold Franklin, second son of the late J. G. Franklin, of J. G. Franklin & Sons, Ltd., surgical-instrument manufacturers, Dalston, to Margaret, youngest daughter of Mr. J. Storrs Bevington, Frinton-on-Sea.

Deaths.

Authenticated notices are inserted without charge.

BYRNE.—At Quay House, Clonmel, on January 19, Mr. James Byrne, J.P., registered druggist, after a long illness. Mr. Byrne was registered as a druggist in 1891 and started in business in Clonmel, where he soon took a leading part in public affairs. During the time he was mayor of the town he promoted the scheme for the local waterworks, and brought the matter to a successful conclusion owing to exceptional ability and energy.

HARRIS.—At 12 East Park Parade, Northampton, on January 23, Mr. Joseph Harris, chemist and druggist, aged eighty-four. Mr. Harris carried on business for many years at Wellingborough Road, Northampton.

HOVENDEN.—At "Oaklands," Haling Park Road, Croydon, on January 18, Mr. Albert Hovenden, senior director of R. Hovenden & Sons, Ltd., druggists' sundriesmen, Berners Street, W., and City Road, E.C., aged seventy-four. The business of R. Hovenden & Sons was originally started by Mr. Hovenden's father in 1811. In the early 'sixties Mr. Albert Hovenden, with his two brothers, purchased the business from their father, and carried it on under the same style until 1899, when it became a limited-liability company. Mr. Albert Hovenden devoted the greater part of his business time to the City Road establishment. He leaves a widow, four daughters, and three sons, two of whom are at present on active service. The funeral took place on January 20.

JACKSON.—At Anfield Road, Walton, Liverpool, on January 25, Mr. Henry Jackson, Ph.C. (Henry Jackson & Sons, druggists and sundriesmen, School Lane, Liverpool), aged eighty-six. Mr. Jackson's serious illness was reported in the *C. & D.* last week. He died on the Friday. He was one of the oldest pharmacists in Liverpool, and one of the few pharmaceutical chemists whose registration dates back sixty-years. He was elected a member of the Pharmaceutical Society in July 1853, and was simultaneously registered as a pharmaceutical chemist. Among his early contemporaries were Robert Sumner and John Thompson; somewhat later came Mr. John J. Evans, who now may be



MR. H. JACKSON.

regarded as the father of the Liverpool drug-trade. We have been informed since our note of last week that Mr. Jackson bought the School Lane business from the founder of it (also named Jackson), and his brother William had a pharmacy in Mount Pleasant. In the 'seventies Mr. Henry Jackson had delicate health, and was accustomed to spend part of the winter in the Mediterranean, so his long life

was all the more remarkable. He was universally liked and respected, and to his employes was ever kind. The funeral took place at Anfield Cemetery on Monday, when the principal mourners were Messrs. H. S. Jackson and J. C. Jackson, sons; Private L. S. Jackson and Mr. R. S. Jackson, grandsons. (Trooper P. S. Jackson, grandson, was prevented from being present, being on active service.) Others present were Messrs. Henry Peet, J.P., M.A. (Adelphi), J. G. Burroughs (John Thompson, Ltd.), H. Humphries Jones, F.C.S. (Liverpool Chemists' Association), F. C. Cooling and W. A. Wynne (Birkenhead and Wirral Pharmacists' Association), W. Wellings (Evans Sons Lescher & Webb, Ltd.), Anthony S. Buck, W. H. Saunders (Ayrton, Saunders & Co., Ltd.), and representatives of the staff of the firm.

LEGGE.—At Peterborough, on January 22, Sergeant Harry Legge, of the R.A.M.C., aged thirty-six. Mr. Legge was a Norwich man, and qualified as a chemist and druggist in 1899. He was a very popular non-commissioned officer, and he was buried at Norwich on Tuesday with military honours.

LEWIS.—At 57 Crayshaw Road, Brixton, London, S.W., on January 19, Mr. Henry Lewis, surgical-appliances manufacturer, Gray's Inn Road, W.C., aged sixty. Mr. Lewis was taken ill while at business, and was assisted home by his assistant, but expired before the arrival of his medical attendant.

LLEWELLYN.—At 34 St. John's Road, Tunbridge Wells, on January 13, Mr. Peter Howell Llewellyn, chemist and druggist, aged seventy-one.

MAUNDER.—At 62 Roseneath Road, Urmston, Manchester, on January 13, Mr. Robert Maunder, chemist and druggist, formerly of Harpurhey, aged eighty-three.

ROBERTSON.—At St. Boswell's on January 21, Mr. James Robertson, chemist and druggist. Mr. Robertson qualified in 1892. He was an enterprising pharmacist and on more than one occasion we reproduced specimens of his advertising. We recall the fact that he was the first one to write to us in regard to the changes which would be effected in the practice of pharmacy by the scheme of National Insurance then only in contemplation. He felt that if chemists did not act in the matter promptly, the doctors would get the dispensing to do, and this opinion was justified at the time by the preparations in medical circles and the comparative indifference to the matter in pharmacy.

RUSSE.—At 24 Chester Road, Cape Town, suddenly, on January 6, Mr. Herman August George Russe, chemist, Hanover Street, Cape Town, aged forty-four.

SQUIRE.—At 25 Holm Villas, Victoria Road, Edmonton, London, N., on January 19, Mr. Frederick John Cripps Squire, chemist and druggist, aged fifty-nine.

WALSH.—At 8 Upper Crescent, University Road, Belfast, on January 20, Isabella (Isa), the dearly beloved wife of Mr. Joseph A. Walsh, Ph.C., Wellington Place, Belfast, formerly manager of Messrs. John Clarke & Co., Donegall Square, West. Deceased, as Miss Isa Moore, was one of the leading Irish vocalists, and was married in 1912 to Mr. Walsh, who is a tenor singer and gold medallist. The funeral, which took place on January 22 at Clifton Street Cemetery, was very largely attended by trade and musical friends.

WOOD.—At the Market Place, Waltham Abbey, on January 20, Mr. Robert Wood, chemist and druggist, aged forty-two. Mr. Wood had complained of feeling unwell on the Sunday preceding his death; he attended business on the Monday, but on the evening of that day he collapsed and lost consciousness, a condition from which he never fully recovered. The funeral took place at Waltham Abbey on January 23.

Cancer-remedies.

DR. CH. VERMEULEN, a Dutch physician, states, in the "Tijdschrift voor Geneeskunde," as the result of many experiments that enzytol does not answer the expectations which had been formed as to its value as a remedy for cancer. Though every precaution was used in order to prevent symptoms of poisoning, enzytol showed poisonous properties. Chemical researches made, at Dr. Vermeulen's request, by M. Lancien in Paris showed that enzytol contains traces of neurine, to which the poisonous properties are attributed. Lancien has since made synthetic choline, and this, neutralised by boric acid, forms the product boro-choline, which the firm Ch. Couturieux, of Paris, furnishes in ampoules of 5 c.c. This product has been administered with much success by Dr. Vermeulen, and so far no poisonous properties have been manifest.

Circulars & Price Lists

inserted in this Issue

ON the last occasion that we had the opportunity of inserting circulars and price-lists in *THE CHEMIST AND DRUGGIST* as Insets—our Summer Issue, July 25, 1914—it was a "week of great political stress and of magnificent naval demonstration," which occasioned the remark that "George the Fifth on the bridge of the Royal yacht leading the fleet is the top-note of British business." There was nothing prophetic in the mind of the writer, but within a week Europe was plunged into war, and the world knows to-day that, taking it as a whole, "business as usual" would not have been possible without the fleet that his Majesty led.

At the same time we said: "On January 30, 1915, we propose to publish a Winter Issue of *THE CHEMIST AND DRUGGIST*, when Insets will again be a business feature." This promise is now fulfilled. On no day since July 25, 1914, has there ever been doubt in our minds that it would be, but we cannot overlook the circumstance that we live in the metropolis of one of the belligerent countries, and that influences have been at work which were calculated to abort the efforts, destroy the confidence, and sap the energies of every British business man. It is such who make a publication like this possible. Our readers will recognise that the Issue reflects as nobly as ever the enterprise of those connected with the drug-business and its branches.

Beginning at the cover (which shows no sign of War's alarms) the reader will find a series of announcements, followed at page 32 by a section of the Insets which we are now about to describe. Again a section of well-displayed advertisements, then more of the beautifully produced Insets begin at page 64, these being backed by further business announcements up to and including page 112, immediately after which the literary section begins. It was long before anyone dreamt of the *Lion* leading the attack on the marauding German fleet, last Sunday that our artist designed the head-piece with Britannia and her lion keeping watch upon the sea—the highway of British commerce. By the time that the reader gets thus far with the Issue he will have glanced over most of the literary contents, which conclude with the "Retrospect" on page 184, when another vein of fine advertisements is "struck." At page 122 we have a third group of Insets, after which is further evidence of how the British drug and allied trades are prepared to meet the wants of buyers at home and abroad.

There is in the City of London a venerable carver who resides at a midday meal in a noted hostelry, where certain announcements have to be made, and one of them always begins: "Gentlemen, in accordance with our ancient custom, we shall," etc. With similar sentiment we now refer to the three groups of Insets, but take them alphabetically, indicating at the end of each paragraph where the subject is placed.

Allen & Hanburys, Ltd.,

once more submit to our readers a specimen of the fine printing which comes from their own press. The front of the inset cover is a colour facsimile of a picture showing a great ocean liner ploughing its way to overseas places with the "Allenburys" foods. On the back of the cover is a picture showing one of the huge motor delivery vans which were more familiar objects to the City of London before the war broke out than they are now, since Allen & Hanburys, Ltd., furnished several of these vehicles for army service duties. The interior of the inset is devoted to three departments of Allen & Hanburys' specialised work. The first has a view of one of the factories at Ware,

where pastilles are made literally within the fields where the fruit for some of them is grown. There also the company manufacture their infants' and invalids' foods, and such products as extract of malt, which, with its combinations, is the subject of the second page, packages being illustrated and prices given. On the third page are views of the A. & H. cod-liver oil factory in Norway, and of the fishing ground, with specimens of cod-liver oil, castor oil, and eucalyptus oil put up ready for retail. The fourth page contains two views of the company's soap factory, and specimens of the products are illustrated. This is a department of Allen & Hanburys' work which has been developed along strictly pharmaceutical lines with every regard for elegance and purity. The list is inserted loose between pp. 33-64.

Baiss Bros. & Stevenson, Ltd.,

devote their inset to diagrammatic illustrations of their steam laboratory and packing floor of Grange Works on one side, with the export packing department, the department devoted to surgical instruments and hospital furniture, and export despatch department on the second page. This old-established firm of wholesale druggists, etc., are well known to home and colonial buyers. They issue and now offer three special price-lists for the home trade, and as many for export trade, and call attention to the fact that they are contractors to His Majesty's Government, the India Office, the Crown Agents for the Colonies, and various foreign Governments. (Pp. 32-33.)

H. Bronnley & Co., Ltd.,

are well known throughout the British Empire as manufacturers of toilet-soaps. They were the first to take advantage and carry into commercial effect in this country Unna's idea of improving soaps by combination with superfatting agents, and more recently they have introduced a further improvement which gives the Bronnley soaps a character all their own. The company illustrate and give prices for three bath-soaps, and on the back of the inset figure Courvoisier's Ess Viotto—that elegant hand lotion which has become indispensable to ladies of refinement. This preparation is on the P.A.T.A. The inset also contains quotations for a number of Courvoisier's soaps and perfumes, including the popular Viotto and Omar Khayyam. (Pp. 122-123.)

Brunner, Mond & Co., Ltd.,

are the company whose enterprise has prevented this country from sinking below the highest place in the production of alkali and soda salts, so essential to our textile industries and needful also in others. Thus amongst their products is sodium bicarbonate, specially produced for preparing carbonic-acid gas for aerating beverages. This bicarbonate is astonishingly cheap, and has a superiority over other sources of the gas in being free from the mess that chalk leaves, and it yields a pure gas. The company's inset fully describes how this bicarbonate is used, and they offer to send a 2-cwt. bag of it to anyone who sends an 8s. postal order to the company's works at Northwich, Cheshire. (Pp. 64-65.)

Butler & Tanner,

give in their inset some sound advice to those who are out to capture German trade. In our opinion it is not possible to do that without good advertising propaganda, and this means well-produced printed matter. Butler & Tanner are known to British pharmacists as the printers of "The Year Book of Pharmacy" and other pharmaceutical works, and for that reason they

have experience which is of advantage to those connected with the drug-business so far as their printing is concerned. Their inset may be regarded as a specimen of the work that they produce, and it will be found between pp. 64-65.

Clayton & Jowett, Ltd.,

are inserting in the Colonial and foreign numbers of this issue an inset devoted to their Gold Seal Brand soluble essence of lemon, also known by the letters "M.P.," meaning "Messina Perfected." The front of this inset is characterised by a realistic bunch of lemons and flowers, with the alchemist seal upon a band of red silk. The reverse of the inset describes the characteristics of the company's "Dry" Ginger Ale and other "Gold Seal" essences.

Freeman's Chlorodyne, Ltd.,

address a letter to "You and all Square Men of the Trade" regarding Freeman's Chlorodyne, in which they emphasise the fact that the retailer's profit on this article is protected by the P.A.T.A. The letter concludes: "Carry on with that enthusiasm and determination only known to Britons." We infer that campaigners will be assisted in that endeavour if they have a bottle of Freeman's Chlorodyne in their haversacks. The reverse of the inset is effective on this point, and is to be used as showcard. It contains statements in regard to the use of Freeman's Chlorodyne by men in the trenches. (Pp. 122-123.)

McKesson & Robbins,

once more contribute to a *C. & D.* Winter issue a price-list of McKesson & Robbins' capsuled pills. These were the first gelatin-coated ovoid pills to be introduced to pharmacists in the British Empire, and they have maintained their reputation for more than a generation. The London agents for the pills are S. Maw, Son & Sons, 7-12 Aldersgate Street, E.C. It is now some years since the firm introduced "Calox," the oxygen tooth-powder, which not only was the first of its kind, but it has maintained its position, is known all the world over, and is recommended by dentists. G. B. Kent & Sons, Ltd., 75 Farringdon Road, London, have the British depot for this popular dentifrice. (Pp. 32-33.)

Mikado Toilet Paper.

A sample of this British-made product will be found between pp. 122-123. It will bear close inspection, for not only is the paper soft and strong, but it is also pure, and just such a thing that our chemists may retail with advantage. It is crinkled and put up in packets and rolls to retail at 6d. Samples for customers can be obtained free from the wholesale houses mentioned in the inset.

Nederlandsche Kininefabriek

supply us through their sole sales agents, R. W. Greeff & Co., Thames House, Queen Street Place, London, E.C., with a most artistic inset devoted to quinine and other alkaloids of cinchona. The first page of this contains a realistic Javan scene of a *Cinchona Ledgeriana* plantation, which is accurate, having been drawn from original views given in Moen's celebrated work on cinchona cultivation in Java. Each of the other pages of the circular is illustrated with branches of the cinchona tree which are botanically accurate. One cannot resist reflecting how the Dutch have benefited the whole world by their patience in cultivating *Cinchona Ledgeriana* from part of the seeds which Charles Ledger brought from South America. The failure with the other part in our own cinchona plantations in India would have kept the world in the old conditions of dependence upon South America for bark had the Dutch not succeeded in Java, and it is also to be noted that the establishment of the Dutch quinine factory in Maarssen has contributed to making quinine and other cinchona alkaloids cheaper. A list of these Maarssen products satisfying B.P. characters and tests is contained in the inset, and R. W. Greeff & Co. supply samples on request and invite correspondence. (Pp. 32-33.)

Postlip Mills

have on several occasions during recent years given *C. & D.* subscribers specimens of the products of their paper mills in the shape of seidlitz-blue paper and filtering paper suitable for pharmaceutical purposes. We again have the opportunity of inserting a circular devoted to these, and for the first time also another circular with reference to pure English filtering papers specially manufactured at the Postlip Mills for laboratory purposes to replace the best makes obtainable from foreign countries. Analytical chemists are aware that there is considerable difficulty in getting supplies of pure filtering paper, and here it is in actuality, its purity and quality being endorsed by a very full report of experiments carried out with the paper at the National Physical Laboratory, Teddington. The results are certified by Mr. R. T. Glazebrook, F.R.S., Director of the Laboratory. This is one of the most interesting insets of the series since it demonstrates the ability of British manufacturers to provide what is wanted when called upon so to do. (Pp. 122-123.)

Potter & Clarke, Ltd.,

confine their inset to three subjects apart from the fine motor-delivery van which is on the front of their circular. Potter's asthma-cure, cigarettes, and smoking-mixture are well-known articles appreciated by the public; also by retailers, who find that they sell readily and yield a good profit. Potter & Clarke are the principal house in the United Kingdom for herbs in packets, and the "Winged Lion" brand leads, but the company are also growers and wholesale dealers in such articles as chamomiles, lavender-flowers, indeed, all herbal remedies, and they invite inquiries to their headquarters, Artillery Lane, London, E. (Pp. 64-65.)

Robinson & Sons, Ltd.,

manufacturers of all kinds of boxes, have recently been advertising these to the trade in a most effective manner, but never, we think, so beautifully and with such force as is shown in their inset. They also give the drug-trade an excellent maxim—"Goods well packed are like seeds sown on good ground." The fair sower in the well-furrowed field makes a fine picture, and her object is to introduce to chemists the new "All Purpose" carton which Robinson & Sons are producing at their Chesterfield works. The company offer a guinea parcel of these excellent boxes consisting of 2,500 of various sizes and styles, full particulars of which are given on the reverse of the inset. (Pp. 32-33.)

Shirley Brothers, Ltd.,

are noted as a house for tin boxes of all kinds. Our Town Traveller has visited their factory and warehouse, and on p. 167 gives some information in regard to the company's facilities. The inset which we now refer to is an illustrated price-list of the "X" series of boxes, and also includes particulars of White-cross ointments, otto of rose cold-cream, and other specialties of the house, besides "Anglopirin," the company's registered trade-mark for acetylsalicylic acid, which they supply in tablets. (Pp. 122-123.)

Spottiswoode & Co., Ltd.,

as the printers of *THE CHEMIST AND DRUGGIST*, make our special issue the text of a concise and forcible address to the trade, especially those who have any printing to be done. In this department Spottiswoode & Co., Ltd., are not only among the oldest houses in the kingdom, but are in the forefront of enterprise, undertaking on behalf of advertisers to advise them how to advertise, how to write good circulars, and how to print them. The novelty of their inset, with its miniature cover of *THE CHEMIST AND DRUGGIST*, is alone a recommendation, and it will be found between pp. 32-33.

H. E. Stevenson & Co.

circulate in the Colonial and Foreign Edition of this issue an inset dealing with concentrated extracts for the production of liquid extracts, tinctures, and infusions, giving examples of the advantages of some

of these for Colonial buyers, prices being provided; and they also give particulars of the "Zinyl" brand of synthetic otto of rose, which is a triumph of modern synthetic chemistry, and a trial lot of it is offered post free to any part of the world at the price quoted in the inset.

Stevenson & Howell, Ltd.,

manufacturers of the "Red Ball" brand of beverage essences, Standard Works, Southwark, use an appropriate and topical design for the front of their inset referring to these products—namely, the British Standard—over which are tablets regarding the award of a gold medal in three consecutive years to beverages made with Stevenson & Howell's essences. In 1912 Brickwood & Co., Ltd., Portsmouth, got the gold medal for lemonade; in 1913 the same makers got the award again for lime-juice and soda made with S. & H. soluble essences; and in 1914 a gold medal for lemonade was awarded to Nuttall & Co., Ltd., Blackburn, thanks to the standard essence. The reverse of the inset is devoted to sparkling "Orana," an exceedingly effective picture conveying a mental impression of the flavour and seductiveness of the fruit beverage made with the "Red Ball" brand perfect soluble essence of sweet oranges. (Pp. 64-65.)

Suttley & Silverlock, Ltd.,

are known to British pharmacists all the world over as chemists' printers. "The secret of our success," say they in a most striking inset, is, "We buy paper and make the rest." The front of the circular bears proof of their capability, but we particularly call attention to the reverse of it, on which there are specimens of the Suttley & Silverlock "Medo" engraving applied to chemists' labels. These are remarkably distinctive, the softness of the engraving having a fine effect, particularly in throwing the designs into relief, akin to what one gets in clay modelling. As something quite fresh, we may predict with safety that there will be a good demand for this novelty. (Pp. 64-65.)

The Western Dental Manufacturing Co., Ltd.,

are specialists in dental preparations, including the materia dentica of practitioners, besides a number of special dental preparations prescribed by dentists and in demand by the public. Their inset is, however, largely devoted to "Densol," a surgical antiseptic of the cresol type, but an entirely British production, a fact which is well marked by the pair of British flags artistically arranged on the front page. Other products of the company are mentioned and described on the back page, and elsewhere in this issue we refer more fully to some of these. (Pp. 32-33.)

The Next Occasion

on which our Publisher will receive specially printed circulars and price-lists as insets will be our Summer Issue, which is to be published on July 31, 1915. We advise business houses who appreciate the effectiveness of this method of advertising to *begin now* to arrange for their own inset, and the publisher will be glad to advise and assist them in preparing insets. Letters addressed to him, 42 Cannon Street, London, E.C., will receive prompt attention.

Cashew-nuts.

The "Trinidad and Tobago Bulletin" has a communication from a Paris firm to the following effect: "We generally pay for these kernels about 40s. per cwt. net weight, cases free, goods put up in 2-cwt. cases. This refers to the slightly roasted kernels, in order to free them from their hard shell, and only the fine thin brown husk adhering to the kernels. We buy about 100 tons annually, and would be extremely pleased if you would kindly put us in contact with one or several serious firms in whose shipments we may have entire faith, as we are disposed to order this stuff, payment against shipping documents. Please note that the above-named price is to be understood c.i.f. Havre, shipment by steamer not touching a European port before coming to France, in order to permit us to enter the goods without special duty obtained from all Colonial goods imported into France *via* any European country."

Notes and Novelties.

BRITISH LANOLINE.

The Hillcrest Oil Co. (Bradford), Ltd., Clayton, Manchester, are offering in this issue hydrous and anhydrous lanoline of their own manufacture.

"CEVANESCO, BERM,"

is the telegraphic address of Van Essen & Co., Ltd., manufacturing chemists, 100 Bermondsey Street, London, S.E. An error crept into the spelling of the first word in our announcement last week.

"LANADEPS."

This is the name which Howard Lloyd & Co., Ltd., Leicester, have given to purified and hydrated wool-fat, which they offer as an ointment basis to replace adeps lanae hydrosus, B.P. They quote in this issue prices for quantities of from 1 lb. to 1 cwt.

THE CALORIS VACUUM FLASK.

Landau & Co., 2 Orchard Street, Westminster, London, S.W., are the manufacturers of this vacuum flask. We commend our readers' attention to the advertisement of it in this issue, which shows the arrangement whereby breakage of the glass portion is prevented.

TRIBAS.

The cream of tartar substitute made by Prescott & Co., 63 Corporation Street, Manchester, finds many uses as the acid ingredient in producing self-raising flour and baking-powders. It is important to note that it is not aluminous, and we may add it is a British product.

COLLAPSIBLE TUBES.

It is worth remembering that Venesta, Ltd., 1 Great Tower Street, London, E.C., are manufacturers of pure tin collapsible tubes and other forms of these modern essentials for toilet-preparations. Also of all kinds of tinware required in packing commodities for chemists' use.

CROOKES' GLASS.

The special glass which Sir Wm. Crookes has invented for absorbing heat and light rays is obtainable from Nitsche & Gunther Optical Co., Ltd., 66 Hatton Garden, London, E.C. For use by glass-workers and those exposed to strong light these glasses are better than anything hitherto employed.

DESK CALENDAR.

Bradley & Bliss, Ltd., manufacturing-chemists and methylated-spirit makers, Reading, produce a desk-companion in the form of a diary and order-form sheaf. The diary lies flat on the desk, and each sheet exposed lasts a week. Incidentally particulars are given of the specialties of the house.

THE "SPATULA" BOOKS.

The Spatula Publishing Company, Sudbury Building, Boston, Mass., advise us that a fifth edition of their "Soda-water Guide" has been despatched to us. We hope to deal with it later, and in the meantime call attention to a list of the company's publications which is printed in this issue.

GUILLEVIC'S AGENCIES.

A list is given in an advertisement in this issue of the principal agencies of E. Guillevic & Co., 19 St. Dunstan's Hill, London, E.C. These are French, Swiss, Italian, and Bulgarian houses, and incidentally indicate the fact that this country attracts all the special chemical products of these nations.

THE CHARACTERS OF VASELINE

are dealt with in an address to the trade which the Chesebrough Manufacturing Co., 42 Holborn Viaduct, London, E.C., insert in our advertisement pages. The issue of a new Pharmacopoeia makes the statement particularly appropriate at the present time. The criticism of the B.P. test for paraffinum molle will be noted.

ESSENTIAL OILS AND PERFUME-MATERIALS.

The Verona Chemical Co., North Newark, N.J., U.S.A., are manufacturers of vanillin, heliotropin, terpineol, thymol, iso-eugenol, terpin hydrate, and distillers of sandalwood oil, oil of cloves, and other essential oils. Inquirers for these articles and large consumers are invited to correspond with the company in regard to their requirements.

GLYCEROPHOSPHATES AND SYNTHETICS.

The Monsanto Chemical-works, St. Louis, Mo., U.S.A., make a speciality of the manufacture of glycerophosphates and their products, including 75-per-cent. potassium and sodium salts, pure anhydrous powder and crystals of sodium glycerophosphate and calcium glycerophosphate. Coumarin, phenacetin, phenolphthalein, and vanillin are also made by them.

ROTARY TABLET-MACHINERY.

Thompson & Capper, Ltd., Manesty Buildings, College Lane, Liverpool, are agents for the Clarke rotary tablet-machine, which is manufactured by the F. J. Stokes Machine Co. Those who have never seen this wonderful piece of apparatus in action will be interested in the engraving and description of it which are given in Messrs. Thompson & Capper's advertisement.

CHILBLAIN REMEDIES.

Chilblains are fairly prevalent at the time of writing, and at any moment weather conditions may result in an increase of this annoying affection. Chemists should be prepared with suitable remedies, and might specially note the chilblain-tablets and Ramefine cream which are packed by Arthur H. Cox & Co., Ltd., Brighton. Particulars are given in an advertisement in this issue.

A WAR ITEM.

Kemp's Vulcanising Co., Ltd., 19 Hardman Street, Manchester, inform us that, just at a time when they were inundated with orders for all classes of rubber and ebonite goods for the wholesale houses, they lost the services of four of their best workmen, including Mr. W. B. Allen, works-manager; in fact, like most other houses, the firm are to-day experiencing the effects of the scarcity in the labour market.

THE "THREE SPEE" SAFETY RAZOR.

This British-made razor has an essential but too frequently neglected part of safety razors—namely, an adjustment whereby the blade may be set to suit each shaver's need. An ordinary razor-blade can even be adapted to the instrument, the sole distributor of which is William P. Kelland, 36 Camomile Street, London, E.C., and 52 Enoch Square, Glasgow. The retail price is 7s. 6d., and this shows a good profit.

SYNTHETIC PERFUMES.

We observe from the announcement of Stevenson & Howell, Ltd., Standard Works, Southwark, S.E., that they have very considerably extended their production of synthetic perfumes, now having no fewer than twenty-three varieties of the "Dulciflor" series, which only require the addition of 40 over-proof spirit to make good perfumes at 4s. per pint. The synthetics are equally useful for perfuming toilet-preparations.

"ALL-BRITISH" VACUUM FLASKS.

Aerators, Ltd., Upper Edmonton, London, N., are doing very good work in producing and offering to the trade vacuum flasks which are made in England by British workmen. We find that comparatively few retailers appreciate the enormous difficulties which have had to be overcome before this could be accomplished. Aerators, Ltd., have succeeded where many failed, and we commend their products to patriotic chemists.

AMERICAN OIL OF PEPPERMINT.

Robert W. Greeff & Co., Thames House, Queen Street Place, London, are the agents for F. M. Rudd, Bronson, Michigan, U.S.A., who is the distiller of "Columbia Natural" and "Diamond White" re-distilled oil of peppermint. These are well-esteemed brands of oil, which are much used by confectioners as well as by

manufacturers of pharmaceuticals, and the agents will be glad to quote large buyers for contract quantities.

SEDNA ADVERTISEMENTS.

Deans, Logan & Co., Ltd., Belfast, the proprietors of Sedna—beef, kola, and coca wine—are reminding the public of the value of this product as a recuperant for soldiers after surgical operations. As presents to local hospitals the donors are likely to apply for supplies to chemists in the neighbourhood. We have also seen an advertisement in Arabic which shows enterprise in reaching new classes of customers.

LONDON-MADE CHEMICALS.

Typical examples of the products made in the model laboratories of Burgoyne, Burbidges & Co., East Ham, London, E., are given in the firm's advertisement in this issue. These include acetanilide and hexamine, both of which until recently were almost entirely imported chemicals. Terpeneless oils are another class of products which these laboratories turn out of a quality which enemy-products cannot touch.

THE SCOUT SOAP TABLET.

Edward Cook & Co., Ltd., Bow, London, E., have introduced a new medicated and household soap under the above name. It contains no animal fat and no added colouring. The germicidal value is equal to that of a soap containing 20 per cent. of carbolic acid, but the tablet is pleasant to use, having a pine-tree fragrance, and is not harmful to delicate skins. The soap is suitably packed in tin boxes, and it is recommended for first-aid purposes, Boy Scouts, and general toilet and household use.

HAY'S PALE DRY GINGER-ALE ESSENCE.

Aërated-water manufacturers in some parts of the country are as busy just now as they are in the heat of the summer. The reason is that a very large proportion of Kitchener's Army are teetotalers. Indeed, the vogue in military circles at present is temperance drinks, and aërated-water manufacturers should not be slow to take advantage of this. William Hay, Ltd., of Hull, and 3 York Street, Walworth, London, S.E., make a pale dry ginger-ale essence of exquisite flavour which deserves attention.

THE "PROJECTOSCOPE."

Some of our readers may have noticed illuminated advertisements on the pavements, and have wondered how these are done. The advertisements are projected by means of an apparatus known as the "Projectoscope," which is supplied by Thompson & Capper, Ltd., Manesty Buildings, College Lane, Liverpool. It is illustrated in an advertisement in this issue. The light required for the "Projectoscope" is obtained from the ordinary electric-current supply. A circular giving full particulars can be had on application to Thompson & Capper, Ltd.

B.P. CARD.

Oldfield, Pattinson & Co., wholesale and export druggists and manufacturing chemists, New Bridge Street, Manchester, have issued a card giving brief details of the changes brought about by the new Pharmacopœia. Tables are given of (a) preparations altered in strength, (b) alterations in composition, (c) additions, and (d) alterations in titles. In the first-mentioned the names of preparations increased in strength are printed in red ink, and the names of those reduced in strength in black. The card is suitable for hanging up at the dispensing-counter, and should prove useful.

EUCRYL AND LYCRYL.

British chemists at home and abroad are familiar with the antiseptic product Eucryl and the tooth-powder made from it, but Lycryl is something new. This is a sterilising cresolic fluid like liq. cresol, sap. B.P., but in some respects a better product. Eucryl, Ltd., 61 and 63 Lant Street, Southwark, London, S.E., call attention to it, and their advertisement contains an order-coupon which enables any retailer to get a bonus of one dozen tins of Eucryl tooth-powder along with an order for three dozen, whereby 100 per cent. profit is obtained. Eucryl, Ltd., send at the same time good advertising-material.

"MALVERNIA."

W. & J. Burrow, The Springs, Malvern, are known to more than a generation of retail chemists in Great Britain as manufacturers of the "Alpha" brand of pure aerated waters made from the celebrated St. Anne's Well. At the present time, when sparkling table-waters of the Continental type have taken a secondary place in British estimation, Messrs. Burrow are making a feature of their "Malvernia" ("Molly"), which, besides being a pleasant table-water for use with spirits and wine, is, owing to its alkaline properties, specially indicated for the use of those who have a tendency to gout, acidity, and allied ailments. It is a water which chemists may confidently introduce to their customers, and Messrs. Burrow will help them in that.

B.P. CONSPECTUS.

Corbyn, Stacey & Co., Ltd., Brunton's Wharf, 673 Commercial Road East, London, E., have published "A Conspectus on the Principal Changes in the British Pharmacopœia 1914," by J. H. Williams, F.C.S. It is a nicely printed booklet of sixty pages, with a red cover. Each article in the Pharmacopœia is dealt with alphabetically—as a rule one or two lines only is required—and, in addition, an indication is given of those substances which have been omitted from the B.P. 1914, but which were included in the B.P. 1898. A system of different type is employed to indicate new, altered, or omitted items. There is an introduction reviewing the main alterations. The "Conspectus" is priced at 1s., but copies are being sent to customers.

SALASPIN.

This is the name of the British equivalent of aspirin, in which Thomas Kerfoot & Co., Bardsley Vale, Lancs, are specialising. The product is put up in tablets and packed in a somewhat novel style. Each tablet has the name of the product impressed upon it, and they are put up in bottles. These bottles are enclosed in very neat dark-grey outer-cases, which have running down the centre a band of lighter grey. The label is in sepia and pale-green. The cartons are packed in boxes of a dozen, which form a show-case. As a counter line this makes it most suitable, while the quiet tones help to influence customers in regard to the medicinal value of the product. Show-cards and free samples may also be obtained on application.

NEWBURY SPECIALITIES.

Eau de Cologne Britannique is the latest line that Francis Newbery & Sons, Ltd., 27 Charterhouse Square, London, have added to their list. It is most effectively put up in bottles to retail at 6d., 1s., and 2s. The label is original, bearing as a background the front of Rheims Cathedral, and at each corner is a national flag—the Union Jack and tricolors of Belgium, France, and Russia, printed in the true colours. The get-up is clever and attractive. The company are also making a feature in this issue of their Royal "Standard" carbolic tooth-powder, which is selling "like hot cakes," and this reference to heat reminds us that that indispensable foot comfort for warm weather, Tiz, will shortly enter upon another big public advertising campaign.

WRIGHT'S COAL-TAR SOAP.

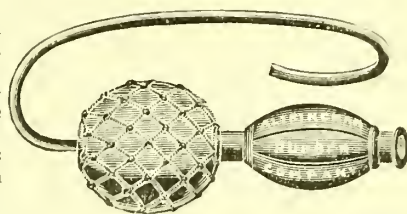
Wright, Layman & Umney, Ltd., 44 to 50 Southwark Street, London, S.E., announce in their advertisement in this issue the result of the last Wright's coal-tar soap window-display competition. The list of prize-winners is of interest as showing that chemists in all parts of the country have taken up the scheme, thus indicating that the popularity is well maintained. In succeeding pages are given reproductions of some of the lithographed show-cards which are offered to chemists. The sizes are indicated, so that there should be no difficulty in picking out those suited for particular positions. The cards are lithographed in colours, and are all in excellent taste. The fourth page of Wright, Layman & Umney's advertisement refers to a list of popular specialities.

ENGLISH SPRAY BELLOWS.

Before the war the imports of indiarubber goods from Germany were large, and they included the bellows for spray-producers.

The Altrincham Rubber Co., Mossburn Buildings, Altrincham, are able to supply much superior bellows of their own manufacture, made in Eng-

land. We have examined specimens of both single and double bellows, which are made with excellent black rubber, either plain or with red seams, the reservoir-bulb being enclosed in silk netting. In all parts the bellows are well made and well finished.



CACHETS "FINOT."

The British agents for cachets "Finot" are Cooper, Son & Co., Ltd., manufacturing chemists, 80 Gloucester Road, South Kensington, London, S.W., who have practically made them known in this country as the standard for medicinal cachets. As is well known, some difficulty has been experienced in obtaining supplies of French-made goods owing to the scarcity of labour due to the mobilisation of the French army. Another difficulty has been that factories situated in certain military areas have to overcome other troubles. It is, therefore, the more interesting to be able to state that cachets "Finot" can be supplied as usual, and that the factory is situated outside the Paris military zone. The cachets are made in various sizes and colours, but all are produced with that brilliant polish which it is not easy to ensure. Names of the chemist can be printed on the cachets, and for these the usual period of fifteen days between receiving and delivering the order is rarely exceeded.

"ALL PRIZES AND NO BLANKS."

Such, indeed, is what the proprietors of Hall's Wine are offering to the trade at the present time in a window-dressing competition. This is arranged in two classes. In Class A the minimum consolation prize is a guinea, the first prize thirty guineas, with an extra two-guinea prize for the window-dresser, and other prizes between the maximum and minimum. Here the conditions are that customers shall place with Stephen Smith & Co., Ltd., proprietors of the wine, Bow, London, E., an order for twelve cases of their proprietaries, including six cases of Hall's Wine, and make a window-display for at least ten consecutive days, sending the company a photograph of it. In the second class six cases of proprietaries, including three cases of Hall's Wine, constitute the order for entering, and the first prize is fifteen guineas and the consolation prize 10s. 6d. It will be noticed that everyone who fulfils these conditions gets at least a consolation prize, besides a bonus.

FICOLAX FEBRUARY.

The British Drug-houses, Ltd., Graham Street, City Road, London, N., are seeking to make the month of February memorable in Ficolax annals. It has been arranged to conduct during February a special advertising campaign in the leading daily papers, in addition to the advertising which is conducted throughout the year. This is bound to occasion a jump in the sales of Ficolax. It is important, however, that pharmacists should back up the newspaper campaign by means of window and counter displays, and also see that their stocks of the article are adequate to meet the demand. To induce chemists to do this a bonus scheme has been devised which is applicable to all orders received within the next few days. The bonus scheme brings down the cost-price considerably, and, moreover, applies to comparatively small quantities, so that all may share in the scheme. An endeavour is being made to reach all in the trade, but in case particulars have not been received by any of our readers they should apply for them.

FOSTERING CHEMICAL-INDUSTRY.

Mr. John Lorimer, Balfour House, 119 Finsbury Pavement, E.C., informs us that he has been appointed selling agent for the English Drug and Chemical Works, Ltd., which has been established at Willesden, with Mr. S. Philip Eastick as managing director, and Dr. Louis Ratner (Ph.D. Zurich), a Russian, as the chief chemist. The company has been formed for the manufacture of certain synthetic chemicals and photographic developers, including glycerophosphates of calcium, sodium, iron, and magnesia, ambrette-musk, ionone, guaiacol, salol, cresol disinfectants, amylene hydrate, linalyl-acetate, and others. In the first instance the works will concentrate attention on the manufacture of glycerophosphates, ambrette-musk, and ionone. Dr. Ratner has been engaged in this business in France, and there is every hope that prompt supplies will be forthcoming. On that point we refer our readers to Mr. Lorimer, who can also give information to inquirers regarding English-made dry batteries. Mr. Lorimer is a director of a company that is producing these, but at present the makers have orders which will keep them engaged until August.

DENTAL SPECIALITIES.

The Western Dental Manufacturing Co. (1914), Ltd., 74 Wigmore Street, Cavendish Square, London, W., also at Bristol, Nottingham, and Cardiff, whose laboratory and works are at West Ealing, W., have perfected a series of preparations which well merit the attention of retail chemists. We have had the opportunity of examining several of the preparations, and have been struck with their suitability for the designed purposes. For example, there are two articles for cleaning dental-plates. One of these is an aromatic and antiseptic soap of soft consistency. It cleans very effectively, removing every trace of grease and other adhesions to the vulcanite which even Brook's soap leaves intact; besides, it makes the teeth bright. This soap is put up in flat glass jars enclosed in an aluminium case. A similarly effective pink powder is also made for the same purpose, and is put up in an original manner. Chemists who are asked by their customers for something to prevent plates from dropping in the mouth may with confidence introduce "Hydro-Suctine," which has agreeable antiseptic properties, and is superior to tragacanth. It is neatly packed in small tins with sprinkler tops, and supplied to retailers in boxes of a dozen at 3s. 6d. We hope to refer later to other products of the company's which are made under the supervision of Mr. Harold Osborn, managing director, but in the meantime suggest that retailers should write to the Ealing address for a list of all.

BOVRIL BONUS PICTURES.

Bovril, Ltd., Old Street London, E.C., have three new pictures that they are to give away to customers



who send to them certain numbers of the coupons which are attached to each bottle of Bovril. The largest picture is a fine gravure of "A Private Rehearsal," by Arthur J. Elsley; another is "Good Night," by the same artist (exhibited in the Royal Academy, 1914); and a third is "A Welsh Valley," by A. de Breanski, jun. This we show. The original is 15 by 20 in., and is reproduced by C. W. Faulkner & Co.,

Ltd. Any retailer can get full particulars about these from the company on application, and on certain condi-

tions the framed pictures are available for exhibition by retailers.

BRITISH-MADE FINE CHEMICALS.

The far-seeing policy which was inaugurated some years ago by Burroughs Wellcome & Co., Snow Hill Buildings, London, E.C., of promoting the manufacture of fine chemicals in this country has been fully justified. At the present moment, when German export trade has entirely ceased owing to the command of the seas of the world being with the Allies, this firm are able to offer fine chemicals of a quality which Germany cannot beat, and no one will grudge praise to the enterprise which has led to this result. The list of British-made alkaloids includes the most delicate of these products, while the fact that glycerophosphates of the highest purity have been made for some years is an additional gratification. Many references have been made to the manufacture of salvarsan by Burroughs Wellcome & Co. under the distinctive name Kharsivan, but the fact that the German makers predicted that no British manufacturer could make this product owing to the enormous difficulties involved only tends to show that the resources of the Dartford Chemical-works are not one whit inferior to the much-vaunted German works. Burroughs Wellcome & Co.'s hexamine is of 100 per cent. purity—actually 2 per cent. above the standard of the British Pharmacopœia 1914. Rytol, the photographic developer, is not a new product, but it surpasses German photographic developers in the wide range within which it can be employed.

SOME FRENCH CHEMICAL-PRODUCTS.

The advertisement of M. Bresillon & Co., Gamage Buildings, London, E.C., introduces to this country several novelties in French surgical and chemical products. We have had an opportunity of examining these articles, and can testify to the ingenious but practical ideas which they embody. The iodobrush is an ampoule of tincture of iodine provided with a cotton brush, by means of which the liquid is gently applied for sterilising wounds. Enormous quantities of iodine ampoules are being used at the Front, and of the various kinds the one under review is not the least ingenious. Empty ampoules are also supplied for carrying sterile liquids, the glass being of the proper kind and the vessels of different colours and shapes. The tamponvules and crayons devised by the Paris house of Corbière & Lindeux are also shown, and here, again, the creative instinct of the French has been pressed into service. The tamponvules used in gynaecological work are in metal cases, easily opened, which keep the contents aseptic. The crayons, or bougies, for uterine medication are each enclosed in a glass tube, an indicated position having been filed so that the tube can readily be snapped open. It will be remembered that the Board of Trade permitted the importation of French-made salvarsan and neosalvarsan, and Messrs. Bresillon sell it under the designations "606" and "914"—designations which sufficiently indicate to the profession what they are. A point which we are asked to mention is that the form in which these products are packed (in ampsalvs and supsalvs) is exceptional, and moreover any required dose can be supplied.

HEART-TROUBLES.—Professor R. C. Cabot, M.D., of Harvard, says that 93 per cent. of 600 recent hospital cases of failing heart have been found to group themselves without much resistance into four classes: rheumatic (streptococcic), syphilitic, arterio-sclerotic, and nephritic.

MANUFACTURE OF WOOD ALCOHOL IN U.S.A.—In the course of investigations into the wood-distillation industry of New York by the College of Forestry at Syracuse it was found that the removal of the tariff on grain-alcohol had hurt the wood-alcohol market so as to make it hardly profitable to produce.

COREAN GINSENG.—The value of the ginseng manufactured in 1913 by the Songdo branch of the Government-General Monopoly Bureau was 142,917, which was entirely taken over by the Mitsui Bussan Kaisha for export to China. The 1913 crop was considerably larger than that of 1912, owing to the scientific methods employed to combat disease of the roots. The exports in 1913 increased, being 835,033 lb., the value being 63,083, or 36,624, more.

Trade Report.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, E.C., January 27, 6.30 p.m.

AS this report closed for press on Wednesday evening, any further market changes will be found in our Coloured Supplement. Business in the interim has been fairly good, and prices as a rule are in favour of sellers owing to the abnormal conditions ruling regarding freights and delivery of the goods. Salicylates are in brisk inquiry and scarce at the moment, with prices rather higher for the sodium. Bismuth salicylate has been advanced 2s. 6d. per lb. Acetyl-salicylic is also firmer; gallic acid, hydroquinone, and potash permanganate are more or less cheaper. Acetic acid is firm and worth attention. Alum and ammonium sulphate are dearer. Cod-liver oil is offering at easier rates. Menthol and quinine are firm markets, while American peppermint oil is tending higher. Lemon oil is very erratic, but cheaper. Bergamot and star-anise oils are easier; orange is unchanged. Opium steady. The principal movements have been as under:

Higher	Firmer	Easier	Lower
Alum	Acetyl-salicylic acid	Anise oil	Gallic acid
Ammonia sulphate	Peppermint oil (Amer.)	(Star) Bergamot oil	Lemon oil
Antimony		Cloves	Lime oil
Bismuth salicylate		Cod-liver oil	Potash permanganate
Cinnamon		Hydroquinone	
Rosin		Mint o.l.	
Sodium salicylate		(Japan)	

London Markets.

ACETIC ACID.—With the considerable increase in freights on raw material, makers of acetic acid are holding for higher prices, and buyers would do well to be covered. Glacial in limited quantity can still be had at 42l. 10s. per on; 80-per-cent. is quoted at from 29l. to 30l., and 90-per-cent. 34l. to 35l. ex wharf London.

ACETYL-SALICYLIC ACID is rather dearer and somewhat scarce, as supplies are coming forward slowly; from 6s. 6d. to 7s. is quoted.

ACONITE.—Napellus is obtainable at 32s. 6d. per cwt. on the spot.

ALOES.—Current prices of Curaçao in cases are: Dull very. 72s. 6d.; fair, 75s.; and good livery, 77s. 6d. per wt. The exports of Cape aloes from the Union of South Africa during November amounted to 20,151 lb. (163l.), against 63,806 lb. (656l.) in November 1913. During the even months ended November the exports were 745,743 lb. (747l.), against 637,296 lb. (7,261l.) for the corresponding period of 1913.

ALUM has been advanced 5s. per ton, lump offering at 7s. 6d. and ground at 7l. 17s. 6d. per ton on rail at orks, these prices being for London and Southern districts. The East Coast export price has also been advanced 10s. per ton to 6l. 17s. 6d. for lump in barrels; there has been no fresh advance in West Coast prices.

AMMONIA SULPHATE is dearer, grey 25-per-cent. for prompt delivery offering at 13l. London; Hull, prompt, 13l. 10s.; with, January-April, 13l. 15s.; Liverpool, prompt, 13l. 15s., is 3½ per cent.

ANISE OIL (STAR) is cheaper, with Red Ship brand offering on the spot at 4s. 3d., and to arrive at 3s. 2d. c.i.f. for January-March shipment.

BALSAM TOLU is offered at 1s. 9d. per lb. net on the spot of good quality.

BELLADONNA-LEAVES testing 0.3 per cent. are offered at 255s., and 0.43 per cent. at 275s. per cwt.

BENZOIC ACID EX TOLUOL.—As supplies of toluol are practically under the control of the War Office, present stringent conditions are likely to remain or increase. Sellers quote 5s. 6d.

BERGAMOT OIL is offered at rather easier rates from primary markets. New crop of well-known makes are quoted 10s. 6d. to 11s. 6d. per lb. c.i.f. for prompt shipment.

BISMUTH SALICYLATE has been advanced 2s. 6d. per lb. to 13s. 6d. to 14s., the lower price being for 2-cwt. lots.

BUCHU.—The exports from the Union of South Africa during November amounted to 1,261 lb., valued at 78l., against 10,604 lb., valued at 1,451l., in November 1913. The eleven months' exports were 142,295 lb. (26,575l.), against 150,118 lb. (29,717l.) in 1913.

CAJUPUT OIL is offered at 3s. 7d. per bottle net on the spot.

CAMPHOR.—Japanese refined has a continued easy tone, ¼-oz. tablets offering at 1s. 9½d. to 1s. 10d. net on the spot, and 1s. 5½d. c.i.f. Slabs are quoted 1s. 8½d. spot and 1s. 4½d. c.i.f.

CARBOLIC ACID remains firm at 1s. 4d. per lb. for 40° C. ice-crystals in large-bulk packing, detached crystals being the usual 1d. extra.

CASCARA SAGRADA.—Spot business has been done at 40s. per cwt., and for old bark sellers ask 45s. There are few, if any, c.i.f. offers available owing to the difficulties of engaging freight.

CELERY-SEED is scarce, with a limited quantity offering at 70s. to 75s. per cwt. on the spot. Recent cables received from France state that the French Government have declared an embargo on exports.

CHALK (PRECIPITATED) is offered at 5l. to 6l. per ton f.o.r. London, according to quality. Lightest and whitest quality is quoted at 12s. 6d. per cwt. in 2-cwt. bags.

CINCHONA.—At the auction of pharmaceutical bark held at Amsterdam on January 21, 1,574 packages (904 bales and 670 cases) were offered, weighing 86,606 kilos, and containing 2,723 kilos. quinine sulphate. This was divided into 76,456 kilos. Succirubra, 7,985 kilos. hybrid, and 2,165 kilos. Robusta, of which 52,057 kilos. were root-bark. Of the above quantity 131 bales and 52 cases, weighing 10,251 kilos, and containing the equivalent of 268 kilos. quinine sulphate, sold; prices paid for the bark ranged from 17c. to 47c. per half-kilo. The manufacturing bark submitted for tender consisted of 11,241 packages, weighing 965,406 kilos., and containing the equivalent of 61,512 kilos. quinine sulphate. The average percentage of the manufacturing bark was 6.37, against 6.31 and an average of 6.03 for 1914. Of the above quantity 6,007 packages, weighing about 514,420 kilos., and containing the equivalent of 32,199 kilos. quinine sulphate, were taken up by the quinine-manufacturers. The average unit paid was 6.20c., being unaltered.

CINNAMON.—At the spice-auction on Wednesday, January 20, 220 bales plantation Ceylon were offered, of which part sold at 1s. 1d. to 1s. 5d. per lb. for good to fine, ordinary firsts at 10½d., seconds at 9½d., and fourths at 8d. per lb.; 49 bales dark quillings were bought in at 7½d. per lb. Ten cases Tellicherry sold at 11d. for firsts, and at 10d. for seconds, and 29 bales broken brought 7½d. per lb. Private rates are dearer, Ceylon assortment offering at 9½d., firsts 10½d., seconds 9½d., thirds 8½d., and fourths 7½d. c.i.f. for February-March shipment.

CLOVE OIL.—Current quotation of English distillers in quantity is 4s. 7d. per lb.

CLOVES.—Zanzibar are quiet, with fair offering on the spot at from 6½d. to 6½d. per lb.; to arrive, sellers of January-March quote 5½d. c.i.f.

COCAINE.—A fair quantity of hydrochloride has lately been taken off the market. Sellers quoted from 7s. 3d. to 7s. 6d., less 5 per cent., without engagement.

COCA-LEAVES.—At the auction held at Amsterdam on January 21, 1,759 packages, weighing 94,808 kilos., the total alkaloidal-content being 1,536 kilos., were all bought in. The average percentage was 1.63, against 1.38, and an average of 1.64 for the nine auctions of 1914.

COCHINEAL.—Black and silver grain is quoted at 1s. 11d. and 2s. 1d. per lb. respectively.

COCOA-BUTTER.—At auction 65 cases Brazilian sold at from 1s. 3d. to 1s. 3½d. in bond.

COD-LIVER OIL.—Quiet, with spot sellers of finest 1914 Lofoten medicinal non-freezing oil at 93s. per barrel ex wharf London. Although there are no definite reports as to the fishing, new oil is offering in a speculative way at 90s. to 92s. 6d. c.i.f., and for 1914 oil 86s. to 87s. c.i.f. is quoted, plus war-risk.

CORROSIVE SUBLIMATE.—Makers' official price in 1-cwt. lots is 3s. 8d.

CREOSOTE EX BEECHWOOD.—Supplies are coming forward from Sweden, sellers quoting 3s. per lb.

ERGOT.—Quiet, with spot parcels of Spanish offering at 2s. 6d., which price is also asked f.o.b. Spain.

EUCALYPTUS OIL is quoted at from 1s. 2½d. to 1s. 2¾d. for (B.P.) water-white.

GALLIC ACID is rather cheaper at from 3s. to 3s. 3d. *Tannic* is quoted at from 4s. to 4s. 3d. for *criss*.

GLUCOSE is dearer, at 14s. per cwt. for liquid, and at from 13s. 6d. to 14s. 3d. for solid. Pearl starch is 12s., and powdered 12s. 3d. on the spot.

GUAIACOL CARB. is quoted at from 8s. 9d. to 9s., with a dearer tendency.

HYDROQUINONE has eased off owing to a little competition, now offering at from 8s. 6d. to 9s. per lb.

IPCACUANHA remains firm at from 15s. 6d. to 16s. for Matto Grosso and 9s. 3d. to 9s. 6d. for Cartagena.

LEMON OIL is a very irregular and fluctuating market, with a wide range of prices; to arrive, from 4s. to 4s. 6d. per lb. c.i.f. for new crop of best brands for prompt shipment; spot values are from 4s. 3d. to 5s.

A Sicilian report, dated January 16, states that the stronger position of which we spoke in our last manifested itself still further early this week, and an increase of about 10 per cent. on previous quotations was paid by some exporters, and also by local speculators. The jump, however, was too pronounced, and no animation on the part of buyers followed the advance; the market, being left to its own course, the reaction was as sudden as the advance had been. Further developments will depend almost entirely on the requirements of foreign consumers and on local requirements against possible blank sales.

LIME OIL.—Fair West Indian distilled is offered at 2s. 6d. per lb.; hand-pressed meets with no demand at about 7s. 6d.

MENTHOL.—The spot price of Kobayashi-Suzuki is from 11s. 6d. to 11s. 9d. per lb., showing a further slight advance since last week; business has been done at the lower price. Like much other produce, it is exceedingly difficult to obtain delivery from the wharf owing to congestion. A fair business is said to have been done in Kobayashi-Suzuki for January-March shipment combined with oil at 10s. 6d., also crystals alone at 8s. 3d. c.i.f. for February-March, and 8s. 2d. c.i.f. for Suzuki.

METHYL SALICYLATE is quoted at 3s. 3d. per lb.

METHYL-SULPHONAL is quoted at from 19s. to 20s. per lb.

MINT OIL.—Sales of Kobayashi-Suzuki for January-March shipment have been made at 2s. 9d. to 2s. 10d. per lb. c.i.f. Spot sellers of Suzuki quote 3s. 4d. per lb.

NAPHTHALINE in balls is offered at 14s. per cwt. in casks and 15s. 6d. in kegs.

OILS (FIXED).—*Coconut* oil is offered at 56l. spot for Cochín and 48l. c.i.f.; Ceylon is 48l. 10s. spot, and 46l. c.i.f. *Cotton* oil, pale 29l., and sweet 32l. *Olco-stearine*, 50s. to 55s. 6d. *Linseed* is 27s. for pipes and 27s. 4½d. for barrels. *Rape*, ordinary brown naked, 32s. spot, and 35s. for British refined in barrels.

OPIMUM.—Market for Turkey opium is steady, with a fair demand, considering the paucity of stock on spot; 11-per-cent. test is offered at 26s. 6d. to 27s., and to come forward 26s. 6d. c.i.f. is quoted for 11-per-cent. Persian is in fair supply, the quotation for 10-per-cent. being 22s. Further shipments from Persian Gulf ports may be expected about February 12. Business with London and the Smyrna and Constantinople markets is now difficult to effect, and no shipments are allowed by the Turkish authorities from these two ports to Salonica (which is regarded as a transshipment port) unless a bond is given to the extent of 40 per cent. of the value that the opium will not be shipped otherwise than to a neutral country. On the other hand, the United States is receiving and has received very fair quantities of opium direct from Turkey.

ORANGE OIL is unaltered at 5s. 9d. per lb. c.i.f.

ORRIS.—Fair bold Mogador is obtainable at 45s. per cwt. Spot prices of Florentine are from 45s. to 50s. for fair to good sorts.

PEPPERMINT OIL.—American tin oil remains firm at from 7s. to 7s. 3d., as to brand on the spot, with a fairly strong undertone; to come forward 6s. 6d. is quoted. H.G.H. on spot is quoted 12s.

PHENAZONE.—Supplies are now becoming less plentiful, and the makers are holding out for 10s. per lb.

POTASH BICHROMATE, as notified last week, has been reduced to 6d. per lb., less 5 per cent. for home consumption, export being 5½d. per lb. net f.o.b. Glasgow, Liverpool, or

Leith. *Sodium* remains at 3½d., less 5 per cent. for home trade, and 3¼d. net f.o.b. for export. There has been a brisk demand for export at the reduced prices.

POTASH CAUSTIC.—Some German supplies to a limited extent have been obtained from neutral countries, but a more rigid control is now being exercised, and exports are practically prohibited from Germany and Austria. Values are very irregular, at from 60l. to 70l. per ton for 88 to 90 per cent.

PYROGALLIC ACID.—Resublimed crystals in 1-lb. tins is quoted at 8s. 6d. to 9s. per lb., and 1-oz. bottles 9s. 6d.

QUICKSILVER is quoted at from 11l. 10s. to 11l. 12s. 6d. per bottle.

QUININE remains firm, with sales of new Continental sulphate at 1s. 2d., with old obtainable at slightly less. The tone generally is distinctly firmer of late, and a fair quantity has been sold for export. We understand the Dutch makers are extremely busy.

SAFROL is offered at 1s. 6d. per lb. net in 1-cwt. cases.

SALICYLATES.—There is a genuine scarcity of sodium salicylate of good quality, but we do not expect these conditions to continue much longer, as strenuous efforts are being made by representatives of French makers to obtain adequate supplies for the British market, and supplies of raw material are being obtained. Meanwhile, with the much reduced spot stocks, holders are taking advantage of the situation by asking from 7s. to 7s. 6d. for sodium. *Salicylic acid* is quoted at from 6s. 3d. to 6s. 6d.

SALOL is firm and scarce, with supplies coming forward very slowly; 5s. 6d. is a fair average price.

SANTONIN.—Further small supplies are on the way from Russia, and the recent quotation of 220s. will in all probability be shaded to 210s. per lb.

SARSAPARILLA.—Current prices are: Grey Jamaica, 1s. 10d. to 1s. 11d.; Lima-Jamaica, 1s. 8d.; red Native, 11d. to 1s. 1d.; Vera Cruz, 8½d. per lb.

SASSAFRAS OIL.—Genuine American is offered at 3s. per lb. net.

SENEGAL is offered at 1s. 9d. per lb. net on spot, at which small sales have been made; and to arrive 1s. 8d. c.i.f. is quoted.

SHELLAC.—Quiet, with small sales of usual standard quality TN Orange on a basis of 62s. to 63s., and fair free AC Garnet at 63s. 6d. Sales for delivery include March at 62s. 6d. A partial prohibition has been placed on exports to certain neutral countries.

SULPHUR.—Spot prices are from 10s. 9d. to 11s. per cwt. for flowers, and 10s. 6d. to 10s. 9d. for roll ex wharf.

TALLOW has been firm throughout the week, but little business done; home demand is good, but export is less active.

TURPENTINE.—American shows little alteration since our last report, closing on Wednesday evening at 37s. 3d. on spot.

WAX, JAPANESE.—The sales include 150 cases January-February shipment at 45s. 6d. c.i.f. London, and 100 cases February-March at 45s. 6d. Liverpool and Glasgow.

WITCH-HAZEL EXTRACT is offered at from 6s. 9d. to 7s. per gal., according to quantity.

Heavy-chemical Markets.

January 26.

The end of the first month of the year confirms the idea that there is a favourable outlook in heavy chemicals. Deliveries, both on contract account and export, are, judging from the reports to hand, satisfactory to producers; prices in this department, however, show little change. Sulphate of copper has throughout had an advancing tendency, in consequence of repeated advances in the raw metal. It opened at 22l. 10s. to 22l. 12s. 6d. delivered Manchester, and closes at 24l. to 24l. 10s. per ton, with higher asking prices forward. Chlorate of potash closes easier and favouring buyers. Permanganate of potash has had a sharp drop, and now rules at 95s. to 100s., as against 120s. a week or so ago. Sal ammoniac shows no change at 47l. to 49l. per ton, with ground quoted 49l. to 51l. per ton. Bichromate of potash rules at 6d. per lb., which is about 1d. lower since January 1. Cream of tartar has been scarcely so brisk, but acids do not seem to have varied very much, although to some extent firmer. Sulphur does not seem to show much change. White powdered arsenic quiet at 19l. 10s. to 20l. per ton, delivered Manchester. In coal-tar products the strength in sulphate of ammonia has been well maintained, and the close is about 15s. to 25s. per ton higher generally than at the opening of the month. Current quotations are: 12l. 15s. London, 13l. 7s. 6d. Hull, 13l. 10s. April delivery Leith, and 13l. 2s. 6d. to 13l. 5s. f.o.r. Manchester. Carbolic acid and benzols remain quiet.

makers here urging the difficulty of negotiating sales on foreign account. Potash bicarbonate, B.P., is quoted 55s. per cwt. Magnesium carbonate, 23s. 6d. per cwt. in cwt. Oxalic acid (7 to 8 cwt. casks), 8d.; ditto 1-cwt. casks, 8½d. per lb. Sulphur, roll, 3-cwt. barrels, 8s. 6d.; powers, 8s. 6d. in 2-cwt. bags. Saltpetre, powdered, 1-cwt. bags, 67s. 6d. per cwt. Zinc oxide, pure B.P., 5-cwt. casks, 4s.; 2-cwt. casks, 42s. 6d.; 1-cwt. kegs, 45s. Zinc sulphate, commercial crystals in 5-cwt. casks, 11s.; and 2-cwt. kegs, 10s. 6d. per cwt. All ex store Manchester.

Arrivals of Chemicals and Drugs.

During the period January 20 to 25, inclusive, the following produce has arrived at the principal English ports. Goods in transit are not included; the figures denote packages where not specifically described:

acetio acid (Mombasa) djhns. 185, (New York) brls. 107, cs. 217, (Rotterdam) crts. 50
alum acid (Marseilles) cs. 19
alum (Mossel Bay) cs. 30
ammonia anhyd. (Baltimore) crts. of oyl. 125
aniline dyes, colours, etc. (Rotterdam) eks. 17, (Amsterdam) eks. 18, cs. 2, (Marseilles) eks. 19, cs. 4
annatto (Copenhagen) cs. 25
antimony (Marseilles) cs. 48
antimony oxide (Rouen) 32
argol (Bordeaux) bgs. 239
arsenic (Bordeaux) eks. 105
arrowroot (Trinidad) brls. 510
Balsams⁵ (Mannos) cs. 10, (Pura) 5
barium chloride (Copenhagen) 70
benzoin (Padang) cs. 4
bismuth metal (Africa) cs. 1
bushin (Cape Town) bls. 13
calcium carbide (Christiania) dms. 280
aluminum tartrate (La Pallice) bgs. 215
anary-seed (Buenos Ayres) bgs. 1,345
cardamoms (Colombo) 60
cassia (Buenos Ayres) 100, (La Pallice) 379, (St. Nazaire) 267
cashew-nuts (India) cs. 200
cedar oil (Calcutta) cs. 50
chemical products (Dunkirk) pkgs. 80, (New York) pkgs. 502, (Dienno) pkgs. 13, (Flushing) 5, (Hofburg) eks. 30
chillies (Zanzibar) bgs. 47, (Mombasa) 140
cinchona (Calicut) pkgs. 160
citric acid (Palermo) eks. 8
cloves (Zanzibar) bls. 6,330, (Penang) cs. 60
cinchona (Marseilles) 5, (Tenebriffe) 10
cream of tartar (Marseilles) eks. 33, kgs. 60, (Palermo) eks. 170, cs. 12, (Bordeaux) eks. 61
citrin (Rotterdam) bgs. 100
citrin divi (Madras) 80, (Cocanada) 22, (New York) 400
gins (Boulogne) pkgs. 9, (Havre) pkgs. 74
got (Oporto) bgs. 32
essential, perfumed oils and waters (Marseilles) cs. 29
kgs. 256 djhns. 56, (Palermo) s. 20, (Messina) cs. 22
eucalyptus oil (Melbourne) cs. 20
gins (Holland) cs. 7,604, bgs. 85
maldehyde (New York) brls. 57, cs. 50, (Rotterdam) cs. 60
fumaric acid (Rotterdam) eks. 2, blns. 60
gins (New York) cs. 15
gins (Buenos Ayres) dms. 41, (Brisbane) dms. 41
gins (Port Sudan) bgs. 82, (Suez) bgs. 451
gins (U.S.A.) cs. 20
gins (Macassar) 943
gins (Amsterdam) 66, (Singapore) 41, (Rotterdam) 294
gins (Batavia) 50
gins (Singapore) 100
gins (Singapore) 100
gins (New Zealand) cs. 12
gins, red (Melbourne) cs. 10

Gums, unenum. (Marseilles) cs. 20, (Lisbon) bgs. 66, pkgs. 70
Honey (Hofburg) brls. 35, eks. 60, (Frisco) cs. 350, (Monte Video) brls. 141, (New York) cs. 20
Indigo (Madras) chts. 156, cs. 33, (Pondicherry) 17, (Bombay) chts. 60, (Calcutta) 365, (New York) cs. 28, (Bimilipatam) 25
Iodine (Las Palmas) kgs. 26, (Dunkirk) pkgs. 2
Ipeacuanha (Monte Video) 9
Lemon oil (Sicily) cs. 34
Lemongrass oil (Cochin) dms. 4
Lime-juce (Trinidad) pps. 9, hds. 13, eks. 54, dms. 35
Lime and orange oils (Trinidad) cs. 39
Linsed (Buenos Ayres) tons 1,604, (Calcutta) bgs. 21,811, (Bombay) bgs. 10,811
Lithopone (Rotterdam) 160
Liquorice-juice (Marseilles) cs. 20, (Naples) 5, (Catania) 10
Liquorice-paste (Philadelphia) cs. 227
Liquorice-root (Marseilles) bls. 79, (Malaga) 18
Lithopone (Rotterdam) 60
Magnesite (Amsterdam) eks. 10, (Dremmen) 51
Manna (Palermo) pkgs. 8
Marjoram (Marseilles) bgs. 43
Menthol (Japan) cs. 10
Mineral waters (Marseilles) cs. 3,370, (Havre) cs. 62, (Naples) 100
Myrrh (Aden) bgs. 9
Nut-oil (Marseilles) brls. 182, (Rotterdam) pkgs. 269
Nux vomica (Madras) bgs. 93, bls. 58, (Cocanada) bls. 60, (Bimilipatam) bgs. 50
Olive oil (Marseilles) brls. 148, cs. 33, bkts. 800
Opium (Singapore) 27, (Calcutta) 63, (Colombo) 19
Orange oil (Palermo) cs. 5, (Jamaica) cs. 13
Oxalic acid (Fredrikstad) eks. 20, cs. 85, (Rotterdam) 7
Palm oil (W.C. Africa) eks. 1,025, (Lisbon) pps. 16
Peppermint oil (New York) cs. 20
Peptone (New York) cs. 90
Perfumery (Marseilles) pkgs. 50, (Calais) 40
Petrolatum (Baltimore) brls. 130
Pharmaceutical prod. (New York) pkgs. 141
Phosphorus (St. John's) cs. 250
Pimento (New York) 1,086, (Jamaica) 359
Potash carb. (Rotterdam) eks. 10, brls. 20
Potash prussiate (Gothenburg) brls. 14
Potash salts (various) (Rotterdam) eks. 40
Potash sulphate (Naples) 247
Quillaia (Monte Video) 170
Quinine (Rotterdam) cs. 35
Roots, herbs, medicinal leaves, etc. (Marseilles) pkgs. 369, seeds (Marseilles) bls. 95, pkgs. 485; roots (Singapore) bls. 29, (New York) pkgs. 113
Saecharin (Rotterdam) pkgs. 40
Saffron (Valencia) cs. 2
Saltpetre (New York) kgs. 200, (Calcutta) bgs. 2,000

Seedlac (Calcutta) 150
Senna (Suez) bls. 30
Shell and button lac (India) 1,662
Soda acetate (New York) cs. 135
Soda hypo. (New York) brls. 5, kgs. 20
Soda oxalate (Treport) eks. 15
Soda prussiate (Rotterdam) eks. 4
Sulphur (Catania) bgs. 1,250, tons 103, brls. 15
Tartar (Naples) eks. 32, (Bordeaux) bgs. 112
Tartar emetic (New York) brls. 30, cs. 12

Turpentine (New Orleans) brls. 1,250, (Savannah) 50, (Las Palmas) 52, (Gothenburg) brls. 25, (Bordeaux) eks. 425
Wax, bees' (Madras) pkgs. 92, (Marseilles) cs. 36, (Beira) blks. 12, (Delagoa Bay) bgs. 153, (Egypt) 16, (St. Malo) cs. 29, (Port Sudan) bgs. 958, (Rotterdam) bgs. 16, cs. 42, (New York) cs. 120, (Jamaica) 5
Wax, Japan (Kobe) 50
Wax, vegetable (New York) bgs. 27
Zinc oxide (Holland) eks. 433, (New York) 1,511

Continental Drug and Chemical Markets.

The following notes chiefly refer to the Hamburg and Berlin markets under date of January 4 and 5:

AGAR-AGAR is scarce, fair strips having been sold at from m.430 to m.440 per 100 kilos.

BALSAMS.—*Copaiba* is dull at from m.250 to m.4 per kilo. *Tolu* is a trifle more in demand at unchanged prices.

BORAX AND BORIC ACID.—Makers are able to meet the demand, but only for limited quantities, and during the war no contracts are being executed.

CALABAR-BEANS.—In slight demand at from m.260 to m.265 per 100 kilos.

CEDARWOOD OIL.—Small quantities are offered at m.165 per 100 kilos.

CITRIC ACID is easier, prices having been reduced to m.490 to m.500 per 100 kilos, for second-hand stocks.

CONDURANGO has been neglected for a lengthy period, and the price remains unaltered at m.80 per 100 kilos.

ERGOT.—Quiet, with practically no demand, though the stocks are extremely small. Russian, as well as Spanish, is obtainable at m.675 per 100 kilos.

FATS AND OILS (FIXED).—Prices are practically unchanged from those given at the end of December. *Castor* is very high, with first-pressing offering at m.250 and second-pressing m.245 per 100 kilos., only a few barrels being available.

FISH-GLUE.—Russian has become very scarce and dearer, and further supplies are not expected. First Salsinski is offered at m.34 to m.35 and Beluga at m.32 to m.33. Good Brazil is quoted m.350 and Trinidad m.650 to m.7 per kilo.

GLYCERIN.—Business is prohibited except under permit of the War Council. Values appear to have reached their highest, and will probably not advance further; from second-hands c.p. 28⁵ can be bought at m.280 per 100 kilos.

IRISH MOSS has considerably advanced in price since the outbreak of war; fair is offered at from m.85 to m.90 per 100 kilos., and other qualities at from m.50 to m.70.

KOLA is firm, but the demand has diminished; good bright whole nuts have been sold at m.140 and halves at m.130 to m.135 per 100 kilos. Prices have a tendency to advance as the stocks become smaller.

LYCOPodium.—A small business has been done at m.640 per 100 kilos, in bags and m.650 in cases.

MALT.—No permission has yet been given for exports from Austria-Hungary to Germany, but manufacturers hope to be able to begin business in February.

MINT OIL.—Japanese quiet, but firm, at m.13.50 per kilo.

MUSK-ROOT has been in active demand, and with small stocks prices have already advanced to m.170 to m.175 per 100 kilos.

RESINS.—Renewed imports of *Mastiche* have led to a reduction, and at the source of origin it can be had at about the same price as previous to the war. There is now less demand, and m.15 to m.17 per kilo. will buy, while for shipment it is much cheaper, and a price below m.10 is expected. *Sandarac* is steady and in active demand; fair pale tear has been sold at m.190 to m.200 per 100 kilos.

SALTPETRE.—The maximum price is m.240 per ton; business can only be done through the Kriesschemikalien Aktien-gesellschaft.

TARTARIC ACID is scarce and firm at from m.285 to m.290 per 100 kilos., according to quantity.

TURPENTINE (VENETIAN).—An Innsbruck (Tyrol) dealer, in his report, states that the bulk of the collectors are at the war, and for this and other reasons a very small quantity has been collected. Moreover, the stocks of the preceding year were small; supplies are being kept for Austrian and German consumption, as the export is prohibited.

WAXES.—*Bees'* dull, Chilean and Brazilian offering at m.370, East African m.345, Madagascar m.335, and East Indian m.325 per 100 kilos. *Carnauba* is quite neglected, and *Japanese* is quoted m.192.50 to m.195 per 100 kilos.



Memoranda for Correspondents.

Communications should be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest.

Correspondents are requested to write each query on a separate piece of paper. Every endeavour is made to reply to queries without delay, but insertion of the replies in "the next issue" cannot be guaranteed, nor, as a rule, can they be sent by post.

Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed, even when the writers use a "nom de plume."

Complete and systematic indexes of the "C. & D." are presented with the last issues in June and December each year. Every subject dealt with week by week is included, and correspondents are advised to refer to these and the "C. & D. Diary" before asking the Editor for information, so as to save time.

Exacerbation.

SIR.—Our attention has been drawn to a letter which appeared in your issue of January 23, signed by Mr. W. H. P. Bolton, of Winchmore Hill, in which reference is made to a recent circular of ours dealing with the visit of the editor of the "Medical Times" to our factory at Penzance. We now beg to inform you that the visit, which was recorded in the "Medical Times" for November 23 last, took place on October 29, 1914.

We are dear Sir, yours faithfully,
12 Chenies Street, W.C. THE SANATOGEN CO.

Is the Belgian Doctor Qualified to Act as a Pharmacist?

SIR.—Have you disentangled the legal position of Belgian doctors—*quâ* pharmacists—under the new Order in Council? The General Medical Council do not seem to know. A query to the Dublin office was sagely referred to London, eliciting therefrom the answer that the Executive Committee were considering what diplomas should be recognised. Registration will presumably give the same rights to British practitioners *re* pharmacy, but it seems clear that pharmacists must also be given privileges of registration.

Yours truly,
Dublin. J. C. McWALTER.

[Dr. McWalter's question arises from the following Order in Council, made at Buckingham Palace on January 7:

"Whereas by the Medical Act, 1886, it is provided (amongst other things) that His Majesty may, from time to time, by Order in Council, declare that the Second Part of the said Act shall be deemed, on and after a day to be named in such Order, to apply to any Foreign Country which in His Majesty's opinion affords to the medical practitioners of the United Kingdom such privileges of practising in the said Foreign Country as to His Majesty may seem just, and from and after the day named in such Order in Council such Foreign Country shall be deemed to be a Foreign Country to which the said Act applies, within the meaning of the Second Part thereof, and that until such Order in Council has been made in respect of any Foreign Country the said Second Part of the said Act shall not be deemed to apply to any such Country.

And whereas the Kingdom of Belgium affords, in His Majesty's opinion, to the registered medical practitioners of the United Kingdom such privileges of practising in Belgium as to His Majesty seems just, during the continuance of the present War.

Now, therefore, His Majesty doth hereby, by and with the advice of His Privy Council, order, direct, and declare that the Second Part of the Medical Act, 1886, shall be deemed, from the date of this Order, to apply to the Kingdom of Belgium, until it is otherwise ordered."

It has been intimated that the Executive Committee of the General Medical Council will meet at an early date to investigate the question of the Belgian qualifications which should be recognised, and not until the Council has formulated the conditions upon which registration of Belgian medical men shall take place can such persons be entitled by law to practise medicine, surgery, and midwifery in the United Kingdom. When that takes place such registered practitioners will be in precisely the same position as any others so far as pharmacy is concerned; Section 16 of the Pharmacy Act, 1868, and Section 1 of the 1869 Amending Act, will exempt them in Great Britain from the first fifteen sections of the 1868 Act, while in

Ireland they will be exempt from the provisions of Section 30 of the Pharmacy Act, 1875, as to keeping open shop, etc., if they have passed an examination in pharmacy—a condition which also applies in Great Britain to medical practitioners who are not apothecaries.—EDITOR C. & D.]

Insurance Dispensing Grievances.

SIR.—Your leader in last week's *C. & D.* touches a point which I am surprised chemists have not before taken up—viz., having their grievances aired in the House of Commons. Personally, I have kept well in touch with my own member of Parliament during the last twelve months, and he has been to considerable trouble for me in getting information direct from the Chairman of the Commission on several points, and he is fully aware of the financial position as regards 1913. Before this is published he will be equally well aware of that of 1914. I am writing asking him to take up the matter on the first opportunity, and I suggest that every panel chemist in a discounted area either write or, better still, see his member and just give him the figures of how his account stands. Never mind about what agreements we signed: as business men they will understand that we have provided services and goods at an agreed price, and want payment. There is just time before Parliament meets, but do it now.—Yours,

BIRMINGHAM. (244/90.)

"The Outlook."

SIR.—G. E. Oliver's recommendation of my ledger is, I fear, somewhat discounted by the absence of facts in the rest of his letter. "Girl labour" is the only kind obtainable; the industrial boom last few years has raked every boy into engineering who did not go to the University or the Services. Even errand-boys are scarce. Shop-keeping trades have been recruited last twenty years by "girls," and the drug-trade is no exception. In many ways they are superior to men, but they have many handicaps: they are "lost" with all mechanical contrivances; everything must be perfectly in order: they have less initiative than men or boys, and they are mostly birds of passage in any trade, and our present examination system is useless to keep most of them in the trade. Those with superior education find less difficulty in the Minor than men do, but they prefer work in institutions to shop-work, so that we lose them also after teaching them. There must be 1,000 qualified women pharmacists now, as against about half a dozen in 1893, when I qualified. Twenty years ago even women doctors were few; to-day many are in practice; one London hospital is run by them. Why not? Our mothers doctor us as children. So it is not a question of what we ought to "let girls do." The fact is that men won't take to the retail, with the long hours and the piffling, trifling nature of the work. Women are deft-handed; men are clumsy, with exceptions, of course.

JAY MACK.

Subscribers' Symposium.

For interchange of opinion among "C. & D." readers, and brief notes on business and practical topics, especially new ideas.

For Finger-cracks.

"I find that for painful cracks in the fingers a weak sacylated collodion is about as good a remedy as I have ever tried."—Abel Scholar.

Pleased.

A *Pendleton Subscriber* (179/31) writes: "We are very pleased with the new *Diary*, and the excellent manner in which the *C. & D.* journal is kept up to date."

The Old B.P. and the New.

A *Dundee Chemist* (173/25), writing for two of our Dose and Metric Cards, remarks: "Excuse me for saying it my idea is that such a demand for your cards goes to prove that a B.P. is still required in imperial as well as metric terms (as formerly)."

Turnip-seed Dressing.

Perplexed (244/56) would be obliged if agricultural chemists would advise him what dressing is used for turnip seed. He understands that just after the seed has germinated, before the leaves open, it is subject to an attack from some grub or fly. The ordinary wheat-dressing is not what is used.

It Pays to Pay for the "C. & D."

An *Edinburgh Pharmacist* (192/20) writes: "I have always pleasure in renewing my subscription to the *C. & D.* I have read it since 1881, and I have subscribed for it since 1889. It is absolutely indispensable to those who wish to keep themselves up to date and in touch with all the vital concerns of the trade, and more especially at this time

when things are in a state of flux, when one never knows what is to happen next. The valuable information, legal and otherwise, the excellent formulæ, etc., are well worth the subscription twice over."

Books on Materia Medica.

"The issue of a new British Pharmacopœia will necessitate revised editions of works on materia medica. I suggest to writers of books on this subject that it would be of great assistance to students to include a pronouncing dictionary of the most awkward terms and names, and a number of special maps. I agree with Southall (Mann) that illustrations of specimens should not be included; the student should work with actual specimens. Map-drawing presents some difficulty in the present crisis. I know that materia-medica maps are issued already, but all these little extras are annoying and expensive to the average student. Let works on a set subject be as complete as possible in themselves."—C. W. *Kimsey-Bourne* (West Bromwich).

Syrupus Simplex.

"Why does *syrupus simplex* sometimes deposit? Years ago Alcock suggested the addition of a small quantity of potassium carbonate to prevent this. I find that when the sugar is dissolved at a lower temperature than boiling (solution being assisted by stirring), the syrup filtered into wide-mouthed glass bottles, such as Gibson's 4-lb. sweet-bottles, and stored on wood shelves (not on the stone or brick floor of a cellar), it remains clear. If, on the other hand, the heating is allowed to go on until the stuff is fairly fizzing—in short, if it does not receive proper attention—however stored, it will deposit. Again, if filtered into stone jars or stored on a cold floor it invariably deposits. There is no doubt that the old-fashioned blue rounds should be scrapped. Syrup, however carefully prepared, always deposits in these, and during warm weather *syr. rhamni, rhei* *eo.*, *violæ*, *et hoc genus*, prepared with concentrated liquors, invariably ferment. Syrup prepared with tap-water has less tendency to deposit or ferment than that made with distilled water."—*C. W. Kemsy-Bourne* (West Bronwich).

[We question if syrupus prepared by boiling until it "fizzes," and not adjusted to the weight required, will satisfy the B.P. requirements—sp. gr. 1.350 and opt. rot. +56° to +58°. Mr. Kensey-Bourne's physical observations are interesting, and we invite expressions of opinion upon them.—EDITOR C. & D.]

A Protest.

"The Log-Roller is at work again, but so very clumsy is his method that few, surely, will be taken in. No one can have the slightest objection to the proposal to adopt uniform rules for dispensing, and if these are wisely framed they will prove a boon to the harassed pharmacist. But I emphatically protest against the fresh attempt to foist the white elephant of Bloomsbury Square, like another old man of the sea, on to the shoulders of the drug-trade. If Rule No. 2 be carried it means that every one of the ten or twelve thousand pharmacists in business will be expected to buy, and will ultimately be badgered into buying, a copy of the 'British Pharmaceutical Codex' whether he wants it or not. This would be a fine stroke of business for the publishers of that ill-fated work, but how is it going to affect the owners of well-known preparations which are so familiar that doctors never think of specifying the maker's name? It is hardly likely that either these owners or the doctors will take it lying down, and if the impudent substitution recommended in this rule be carried into effect some unsuspecting pharmacist will soon find himself in trouble. Whatever case might be made out for some such proceeding in connection with Insurance prescribing, there is absolutely no excuse for falsification and substitution in the case of non-panel prescriptions where the intentions of the prescriber are well known, even if they are not definitely 'indicated.'"—*Dispenser*. (242/2.)

Insurance Dispensing and Club Practice.

"All our working men here, who are, of course, insured under the National Insurance Act, are also in clubs, and I find that the doctors are still dispensing for them. Can the doctors legally do this? The reason the men still have their clubs is because for 6d. per week the doctors not only attend them, but also their wives and families, who, by the way, would get no attendance if their husbands did not continue their clubs. The doctors are getting all their money from the Insurance Committee for nothing (with the exception of those few they prescribe for who are not in clubs), as they are only doing the same work as they did before the Act. It is also not likely that the Insurance Committee would complain if they knew, because by the doctors still dispensing there are so many prescriptions less for that Committee to pay."—*Adops* (239/60).

[If the doctors have not come to an arrangement with the Insurance Committee to dispense medicines for insured persons residing more than a mile beyond the nearest panel chemist, they are infringing the terms of their agreement with the Committee, which requires that they "shall order on the form provided by the Committee such drugs and appliances as are requisite for the treatment of any patient." It is also provided that "the practitioner shall not accept any fee or other remuneration in respect of treatment." The club arrangement violates the latter particular. The local Pharmaceutical Committee should deal with the matter.—EDITOR C. & D.]

Dispensing Difficulties and Notes.

Readers are advised to consult "The Art of Dispensing" in regard to compounding difficulties. We welcome fresh problems and invite the co-operation and correspondence of dispensers in their elucidation.

Comments Wanted.

SIR.—I should like your comments on the following prescription:

Tinet. opii	...	..	...	...	miv.
Pulv. tragacanth.	...	...	...	...	gr. x.
Ol. ricini	...	...	...	...	ʒj.

Misce. Mitte 3iv. Sig.: 5j. bis die.

Is it pharmaceutically correct? If not, can it be made so without undue interference, or what formula would you suggest to meet the prescriber's wish? I dispensed it as written, but the doctor says it should be an emulsion.—Yours faithfully, STYMIED. (1913.)

[This prescription is not pharmaceutically correct. If to be dispensed as it stands, the tragacanth is unnecessary: if an emulsion be required, water must be used, but the prescription furnishes no guidance as to the quantity. Tragacanth is moreover not a good emulsant of castor oil. It would be well to bring to the prescriber's notice the castor-oil mixture of the British Pharmacopœia. It contains about 58 per cent. of the oil, which is presented in a very elegant form.]

A South African Prescription.

T. B. W. (215/52) asks what is the correct way to dispense the following prescription:

Tinct. iodi,
Tinct. arnicæ,
Vaselini aa.

M. ft. ung. 5viii.

[The prescriber has in this prescription apparently left the compounder to fill in the quantities. Such procedure, while not of frequent occurrence, is at least not unknown in practice, and this is just such a combination as lends itself to this way of prescribing. The prescriber knows iodine and arnica to be used for sprains and bruises (arnica was known at one time as *panacea lapsorum*), but he is not sure of the conventional proportions in which to order them. The two together may suitably be employed in the proportion of 1 in 8. Mix $\frac{1}{2}$ fl. oz. of tincture of iodine with $\frac{3}{4}$ oz. of vaseline, and $\frac{1}{2}$ fl. oz. of tincture of arnica with $\frac{3}{2}$ oz. vaseline; then form the two into an ointment. Quite a nice ointment is produced in this way, and some we have prepared has remained for ten days without separation or change of colour.]

A Queer Pill.

SIR,—A short time ago I had the following prescription brought in:

Atropin.	...	...	...	...	gr. $\frac{1}{6}$
Aq. dest.,					
Glycerin.	...	...	...	aa.	3ss.
P. tragac.	...	...	...	...	q.s.

Ft. mass. et divid. in pil. xx.

Can you suggest any way to make them of a reasonable size and consistency? I could not make anything presentable of them, so made them up as follows:

Atropin.	...	...	...	gr. $\frac{1}{6}$
Pulv. sacch. lact.	...	...	...	gr. XL
Glyc. trag.	...	...	...	q.s.

Yours faithfully,

F. A. W. (240/67.)

[Your procedure appears to have been quite correct. When excess of moisture occurs in material ordered for pills it is customary to evaporate off the unnecessary portion. If this practice were followed in the present instance the result would be pretty much the same as you have obtained by a quicker method.]

What was Meant?

SIB.—I have the following prescription to dispense:

Formaldehydi	...	...	...	5 per cent.
S.V.R. ad	...	...	...	3iv.

M. M.d.u.

The prescriber made a note at foot thus: "Formaldehyde to be in gaseous form, not in watery solution." I should be glad to know what is meant, and how should it be dispensed?—Faithfully yours, RADIX. (239/62.)

[Formaldehyde, as commercially sold is approximately a 40-per-cent. solution of gaseous formic aldehyde. No doubt what the prescriber means is that the application is to contain 5 per cent. of real formaldehyde, and not 5 per cent. of the 40-per-cent. solution. It will therefore be necessary to use sufficient—3ss.—of the 40-per-cent. solution to afford this strength. Confusion has frequently arisen in this connection owing to the loose way in which the term formaldehyde has been employed. Now that the solution has been included in the Pharmacopoeia under its proper description, liquor formaldehydi, we may anticipate that prescribers will take advantage of the guidance thus afforded them.]

Legal Queries.

The majority of difficulties in regard to trade law are explained in the legal section of "The Chemist and Druggist Diary," 1915, beginning on page 405.

Skin (243/30).—"Skin Specialist" is a description that anyone may use, but if the user practises as an apothecary, use of the description may be evidence against him.

B. W. (239/38).—The headache-powder composed only of acetyl-salicylic acid, and sold with a recommendation for headache, toothache, neuralgia, and all nerve-pains, may be sold unstamped by any registered chemist or any person who is licensed to retail dutiable medicines.

Salol (245/16).—(1) Limited companies have to communicate the names of their superintendents to the Secretary and Registrar of the Pharmaceutical Society, not the names of branch managers. (2) The sale of wines by chemists on the half-holiday is, like the sale of medicines, exempt under the statutory conditions. See *C. & D. Diary*, p. 423. (3) Write to the Secretary of the Pharmaceutical Society, 16 Bloomsbury Square, London, in regard to dispensing for soldiers' dependants.

Miscellaneous Inquiries.

We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas of them. When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how.

We do not as a rule repeat information which has been given in this section during the past twelve months, but give the reference to the issues in which the information may be found. If querists cannot refer to these they may obtain the numbers from the "C. & D." Office at the published price, usually 6d.

D. G. (232/65).—In the *C. & D.*, August 8, p. 35, we reprinted the Special Army Order issued by the War Office on August 4. No special rank was offered in that Order, simply a bounty of 5*l.* paid on approval, and payment at the rate of 6*s.* per day. No dispensers were appointed under the Order after August. The ordinary regulations of the R.A.M.C. require that before any person is appointed an Army dispenser he should hold the rank of sergeant, or rather that he cannot enter for the examination for appointment as a compounder until he is a corporal, and on appointment as dispenser he receives the rank of sergeant. This appears not to apply to those appointed under the Special Army Order. We are not surprised to hear that dispensers who remain privates are dissatisfied.

M. P. S. (232/47).—FORMALIN-TABLETS are made with para-formaldehyde, 1 lb. of which is dissolved in 40 oz. of water and the solution mixed with 5 lb. of sugar of milk and dried. This is then mixed with 96 lb. of the B.P. simple lozenge basis, to which 8 oz. of citric acid has been added, also menthol 1 oz. in as much rectified spirit. Make into 10-grain lozenges or tablets as desired.

Booco (233/22).—COMPOUND INSECT-POWDERS.—See *C. & D.*, May 6, 1911, p. 71, for some good formulae.

W. H. C. (225/35).—METOL-OUTINOL DEVELOPER, in powder form.—See *C. & D.*, July 27, 1912, p. 177.

P. H. G. (230/69).—THICKENING SAUCE.—It is probable that other forms of starch, such as rice-flour, would behave the same as cornflour, which you have found unsatisfactory. Tragacanth being too expensive, we advise you to experiment with mucilaginous seeds, such as linseed, quince, wild olary, and psyllium.

K. P. F. (231/30).—GREEN AMMONIO-CITRATE OF IRON.—The following is the process for making ferri ammon. cit. vir.:

Dissolve 32.5 parts of ferric chloride in a small quantity of water, and precipitate the hydroxide by adding ammonia in excess. Well wash the precipitate, and drain. Stir in 84 parts of powdered citric acid until solution is effected, adding, if necessary, a little more water. Cool the solution, and add 36.7 parts (by weight) of ammonia (880°), when a clear dark-green solution results, which is filtered and scaled on glass.

T. S. M. (3/12).—PHOSGENE GAS.—Pure carbon oxychloride, carbonyl chloride, or phosgene gas (COCl₂), is best made by the method of Wilm and Wischin, which is a modification of the original process used by Davy in 1811. Chlorine and carbon monoxide issuing at about the same rate are brought into a large glass balloon having a capacity of about 10 litres. From this balloon the mixed gases pass into a second one, which, like the first, is exposed to sunlight. It is best to employ a slight excess of chlorine, this being afterwards got rid of by passing the gas through a tube filled with lumps of metallic antimony. The gas thus purified can be liquefied by passing into a tube surrounded by ice or a freezing-mixture. Carbon oxychloride is also formed by heating together on a water-bath a mixture of 20 parts of chloroform, 400 parts of sulphuric acid, and 50 parts of potassium bichromate.

D. A. (240/21).—The first objection to the use of methylated spirit in the preparation of TR. IODI MURIS, B.P., is on the part of the Customs and Excise authorities, who do not permit it; in the second place, the tincture so made soon becomes exceedingly objectionable, emitting an irritating vapour which affects the eyes, nose, and skin.

R.A.M.C. (240/96).—The best basis for an OIL TO SOFTEN AND PRESERVE SOLDIERS' BOOTS would be a common fish oil: even stale cod-liver oil would do if it can be got cheap enough. As to the disinfection, 5 per cent. of carbolic acid is enough to add to the oil, but exposure to light and moderate heat is better. The boots should first be dried carefully by heat, and the carbolised oil applied while they are warm.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," January 14, 1865.

Trade Report.

Since the commencement of the month there has been more trade doing in chemicals at the late low prices. The further reduction in the rate of discount by the Bank is likely to give a better tone to both buyers and prices. A good many parcels of Tartaric Acid have been sold at 1*s.* 4½*d.* to 1*s.* 4¾*d.*, and small lots at 1*s.* 5*d.*; now holders are firmer at the latter price. Only moderate sales have been made in Citric Acid at 1*s.* 7*d.* Oxalic remains quiet at 9*d.* to 9½*d.*, only small sales making at the former price. A good business has been done in Chlorate of Potass at 12*d.*, which is rather better. Sal Acetos remains quiet at 11½*d.* Prussiate of Potass remains dull and nominal at 11½*d.* More inquiry for Bichromate, and several parcels sold at 6*d.* Iodine is rather more in demand at 5½*d.* A large business has been done in Quinine, English having declined 3*d.* per oz.; the price is now steady at 5*s.* 9*d.* Pelletier's has declined to 5*s.* 5*d.*, at which price a fair business has been done. Soda-crystals are more in request, and makers are firm at 90*s.* ex ship. Ash is steady at 1½*d.* to 2*d.* per degree. Cream Tartar advanced to 102*s.* 6*d.* to 105*s.*, but is again quiet. Small sales in Sulphate of Copper have been made at 27*s.* 6*d.* to 28*s.* Flour of Brimstone is dull at 11*s.* 6*d.* to 12*s.* A good business has been done in Bleaching-powder at 11*s.* to 11*s.* 6*d.*, which is about 6*d.* dearer. Sal Ammoniac is steady at 36*s.* for seconds and 38*s.* for firsts. Sulphate of Ammonia in good demand at 13*s.* 6*d.* to 14*s.* 6*d.* according to quality. Alum is steady at our quotations. Refined Saltpetre is quiet at 35*s.* to 35*s.* 6*d.* cash, f.o.b. Linseed Oil remains dull, and prices are rather cheaper; spot 33*s.*, Hull 32*s.* 6*d.*, and forward 34*s.* to 34*s.* 3*d.* Rape is steadier; brown 43*s.*, and refined 46*s.* 6*d.* to 47*s.* Canada Pot and Pearl Ashes are rather cheaper. No change in Rosin. Turpentine is rather better; last sales made at 64*s.* for French. A good business has been done in Petroleum at 2*s.* 1½*d.*, but market is now quiet.

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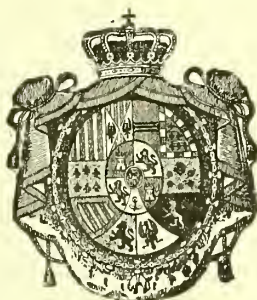
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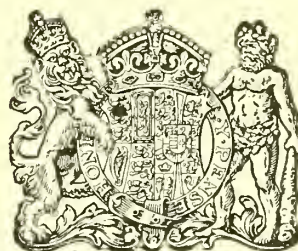
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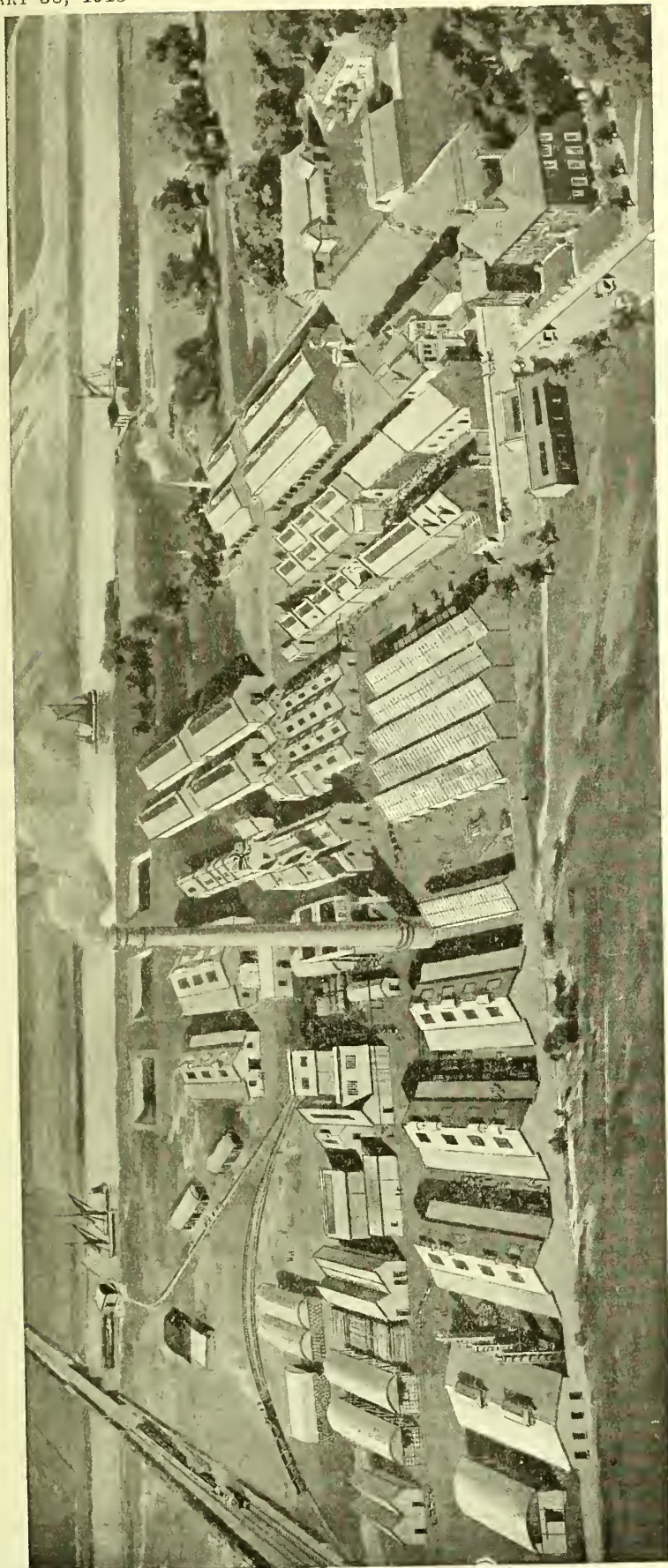
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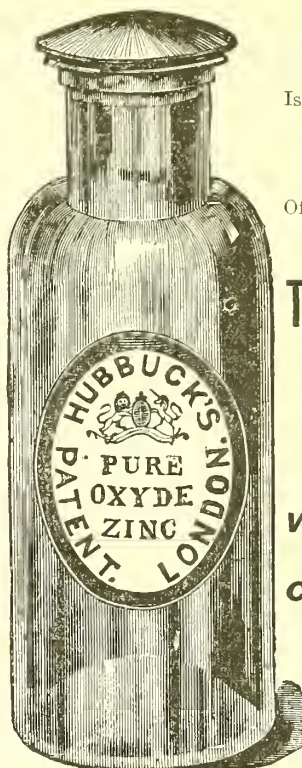
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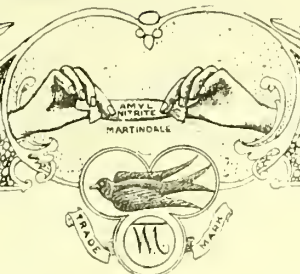
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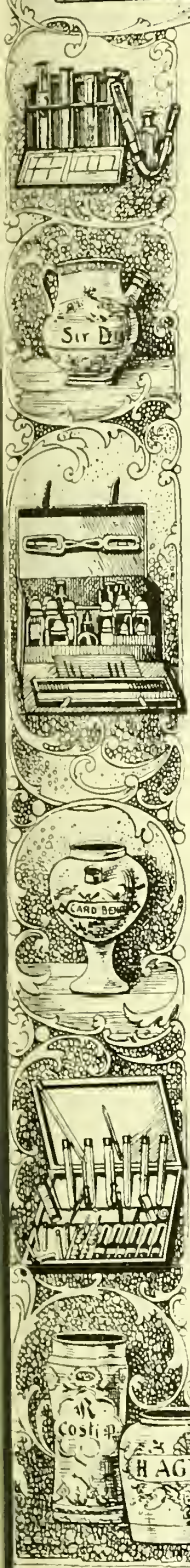
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Hoarseness, &c. &c.*

IN BOXES, 1s. 1½d. AND 2s. 9d. EACH, WITH FULL DIRECTIONS.

Home Retailers of BEECHAM'S PILLS desirous of exhibiting Showcards or Dummies, and wishful to have a good supply of Handbills various sizes and colours, with name and address at foot), Oracles, &c., should apply to the Proprietor—

THOMAS BEECHAM, ST. HELENS, LANCASHIRE.

N.B.—Prices quoted herewith are for preparations according to the New Pharmacopoeia, 1914.

PRICES ISSUED WEEKLY.

Original packages can generally be supplied at the Current Prices quoted in the Trade Report of this Paper on Terms 30 Days.

N.B.—We would draw attention to the fact that all prices quoted herein are subject to alteration without notice, and that where stocks are limited preference is always given to our regular customers.

<p>Aacet. Ipecac. B.P., 7 lbs. @ 1/9 lb. " Scilla, P.B., 7 lbs. @ 4½ lb. Acid. Acet. Glacial, 99% Carboys, 160 lbs. @ 50/-; 12 6-lb. bots. @ 9d. lb.; 6 lbs. @ 10d. lb. " Acetyl-Salicyl., 7 lbs. @ 7/3 lb.; 1 lb. @ 8/- lb. " Horic Pulv., 3 cwt. @ 34/- cwt.; 1 cwt. @ 34/6 cwt.; leviged 3/- cwt. or ¼ lb. extra. Ammon. Brom., P.B., 1 cwt. @ 3/9 lb.; 7 lbs. @ 4/- lb. Ammon. Carb. lump, 3 cwt. @ 4½ lb.; 28 lbs. @ 5½ lb.; 7 lbs. @ 6d. lb.; powder, ¼ d. lb. extra. Amyli Pulv., 10 cwt. @ 13/- cwt.; 2½ cwt. @ 14/- cwt.; 1 cwt. @ 16/- cwt. Aqua Anethi Conc. 1-40, 1 lb. @ 2/11 lb. " Anisi Conc. 1-40, 1 lb. @ 3/1 lb. " Aurant. Trip., 53 lbs. for 23/-; 6 lbs. @ 7d. lb. " Aurant. Conc. 1-40, 1 lb. @ 6/1 lb. " Cinnam. Conc. 1-40, 1 lb. @ 3/4 lb. " Rosæ Trip., 53 lbs. for 25/-; 6 lbs. @ 7d. lb. " Rosæ Conc., 1-40, 1 lb. @ 7/- lb. " Samb. Conc., 1-40, 1 lb. @ 6/1 lb. " Samb. Trip., 53 lbs. for 29/-; 6 lbs. @ 8d. lb. " Laurocerasi, 53 lbs. for 22/-; 6 lbs. @ 7d. lb. " Menth. Pip. Conc., 1-40, 1 lb. @ 3/- lb. Argent. Nit., 6's to oz., 25 oz. @ 1/9½ oz.; 1 oz. @ 1/11 oz. " Cryst., 25 oz. @ 1/8 oz.; 8 oz. @ 1/9 oz. Bals. Copaiba, pure, 44 lbs. @ 1/8½ lb.; 9 lbs. @ 1/11 lb.; 1 lb. @ 2/2 lb. " Peruv., P.B., 7 lbs. @ 8/6 lb.; 1 lb. @ 9/- lb.</p>	<p>*Ext. Hamamelis Liq., P.B., 5 lbs. @ 3/5 lb. Ext. Hyoscyam., Solid, B.P., 3 lbs. @ 5/1 lb.; 1 lb. @ 5/5 lb. Ext. Malti c. Ol. Jecoris, 10 lbs. @ 5½ lb. *Ext. Nucis Vom. Liq., P.B., 5 lbs. @ 3/5 lb.; 1 lb. @ 3/8 lb.; solid, 5 lbs. @ 3/7 lb.; 1 lb. @ 3/10 lb. Ferri Ammon. Cit., P.B., 28 lbs. @ 2/9 lb.; 7 lbs. @ 2/10 lb. Ferri et Quinina Cit., P.B., 100 ozs. @ 6½ d. oz.; 25 ozs. @ 7½ d. oz. Honey, Pale Set, Jamaica, 3½ cwt. @ 37/- cwt.; 28 lbs. @ 50/- cwt.; Californian, ½ cwt. @ 52/6 cwt.; 7 lbs. @ 7½ d. lb. Chthylol Ammon. Sulphonas, 7 lbs. @ 7/- lb.; 1 lb. @ 7/6 lb. "Int. Aurant. Conc., 1 to 7, 6 lbs. @ 1/3 lb. " Aurant. Comp. Conc., 1 to 7, 6 lbs. @ 1/3 lb. " Buchu Conc., 1 to 7, 6 lbs. @ 2/1 lb. " Calumbe Conc., 1 to 7, 6 lbs. @ 11d. lb. " Caryoph. Conc., 1 to 7, 6 lbs. @ 1/- lb. " Cascarilla Conc., 1 to 7, 6 lbs. @ 1/4 lb. " Cinchonæ Acid, 1 to 7, 6 lbs. @ 1/7 lb. " Gentianæ Co., 1 to 7, 6 lbs. @ 1/1 lb. " Quassia Conc., 1 to 7, 6 lbs. @ 9d. lb. " Rhei Conc., 1 to 7, 6 lbs. @ 1/6 lb. " Rosæ Acid. Conc., 1 to 7, 6 lbs. @ 1/8 lb. " Senegæ Conc., 1 to 7, 6 lbs. @ 2/1 lb. " Valerian Conc., 1 to 7, 6 lbs. @ 1/3 lb. Lin. Campb. P.B., 40 lbs. @ 1/- lb.; 9 lbs. @ 1/1 lb. Lin. Sapo. Meth., 9 lbs. @ 7d. lb. " Tereb. Acet., B.P., 5 lbs. @ 1/- lb. Linseed c. Oil, Crushed, 3 cwt. @ 19/- cwt.; 1 cwt. @ 20/- cwt. *Liq. Ammonii Acetatis Conc., 1-7, 6 lbs. @ 8d. lb.; 1 lb. @ 10½ d. lb. " Ammon. Aromat., 6 lbs. @ 9d. lb.</p>	<p>Ol. Geranii Gall. Opt., 1 lb. @ 28/- lb.; 8 1-oz. bots. @ 2/3 oz.; 1 oz. @ 2/6 oz.; Turc., 1 lb. @ 12/6 lb.; 4 ozs. @ 15/- lb. Ol. Menth. Pip. English, 5 lbs. @ 33/6 lb.; 1 lb. @ 34/6 lb. Ol. Olive, P.B., good yellow, guaranteed pure, 45 gall. barrels @ 5/2 gall.; 2 gall. tins @ 5/11 gall. Oxymer Scilla, B.P., 5 cwt. @ 34/6 cwt.; 1 cwt. @ 36/6 cwt.; *7 lbs. @ 7d. lb. Pepsin, B.P., 10 lbs. @ 12/6 lb.; 1 lb. @ 13/- lb.; Phenacetin, P.B., pulv., 7 lbs. @ 7/- lb.; 1 lb. @ 7/3 lb. Phenazone, P.B., 7 lbs. @ 10/6 lb.; 1 lb. @ 11/- lb. Phenolphthalein, 7 lbs. @ 9/- lb.; 1 lb. @ 9/6 lb. Plumbi Acetas, Druggists, 1 cwt. @ 45/- cwt.; 7 lbs. @ 6½ lb.; Powder, 1½ d. lb. extra. Potass. Acetas, Gran., P.B., 28 lbs. @ 1/5 lb.; 7 lbs. @ 1/6 lb. Potass. Iod., P.B., 1 cwt. @ 12/10 lb.; 14 lbs. @ 13/4 lb.; 3 lbs. @ 14/- lb. Rad. Jalap. English Ground, 28 lbs. @ 1/3½ lb.; 7 lbs. @ 1/4½ lb. Rad. Rhei E.L. English Ground, 1 cwt. @ 1/3 lb.; 28 lbs. @ 1/6 lb.; 7 lbs. @ 11/7½ lb. Saffron, Valencia, B.P., 7 lbs. @ 40/- lb.; 1 lb. @ 41/- lb.; 1 oz. @ 2/10 oz. *Syr. Aurant. P.B., 7 lbs. @ 10½ d. lb. " Easton, B.P., 7 lbs. @ 1/2 lb. " Ferri Iodid. P.B., 7 lbs. @ 1/5 lb. " Ferri Phosph. Co., 7 lbs. @ 6½ d. lb. " Hypophosph. Co. B.P.C., 7 lbs. @ 10½ d. lb. " Pruni Virg., B.P., 8 lbs. @ 8½ d. lb. " Rhamni, 7 lbs. @ 11d. lb. " Rhei, P.B., 7 lbs. @ 9d. lb. " Scilla, P.B., 7 lbs. @ 6d. lb. " Sennæ, P.B., 7 lbs. @ 9½ d. lb. " Tolut, P.B., 7 lbs. @ 8½ d. lb.</p>
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OUR NEW DETAILED PRICE LIST FOR JANUARY IS NOW READY.

<p>Bals. Sulphur, 7 lbs. @ 8d. lb. " Tolut, B.P., 50 lbs. @ 2/5 lb.; 1 lb. @ 3/2 lb. Bismuth, P.B., Carb., 28 lbs. @ 11/6 lb.; 7 lbs. @ 11/9 lb.; 3 lbs. @ 12/- lb.; 1 lb. @ 12½ lb.; subnit. 1/- lb. less. Boracic Mixture, 1 cwt. @ 44/- cwt. Borax, 1 cwt. @ 20/-; powder 1/- extra. Butyl Chloral Hydras., P.B., 1 lb. @ 14/- lb. Camphor., English Flowers, "not artificial," 5 lbs. @ 2/3 lb.; 7 lb. tabs., ½ oz., ½ oz., or ¼ oz. @ 2/4 lb. Crude, good white, about 92% as imported, 140 lbs. @ 1/9½ lb.; 28 lbs. @ 1/10½ lb. Cocaine Hydrochlor., B.P., 25 ozs. @ 7/8 oz.; 4 ozs. @ 8/3 oz.; 1 oz. @ 9/- oz. Cream Tartar, 98% powder, 1 cwt. @ 151/- cwt.; 7 lbs. @ 1/7 lb. Dec. Aloes Co. Conc., 1-2, 6 lbs. @ 1/10 lb.; Sincroco, 6 lbs. @ 1/2 lb. " Cinchonæ (Rubræ) Conc., 1-7, 6 lbs. @ 1/10 lb. " Senegæ Conc., 6 lbs. @ 2/6 lb. " Mulsoil Ol. Morrhuæ, 5 lbs. @ 11d. lb. " Ess. Bergam. (Oil), 12 lbs. @ 12/6 lb.; 1 lb. @ 13/6 lb.; not guaranteed absolutely pure. " Limonis (oil) original coppers, 12 lbs. @ 4/9 lb.; 6 1-lb. bots. @ 5/3 lb.; not guaranteed absolutely pure. Ext. Belladonna Liq., B.P., 5 lbs. @ 7/9 lb.; 1 lb. @ 8/- lb.; solid, 7 lbs. @ 4/7 lb. Ext. Cascara Sag. Liq., B.P., 1 cwt. @ 1/2½ lb.; 10 lbs. @ 1/4 lb. Ext. Ergot. Liq., P.B., 5 lbs. @ 4/9 lb.; 1 lb. @ 5/3 lb.; Solid, P.B., 4 lbs. @ 20/- lb.; 1 lb. @ 21/- lb. Ext. Glycyrrh. Liq., B.P., 6 lbs. @ 1/7½ lb.</p>	<p>*Liq. Antim. Chlor., Pure, 8 lbs. @ 6½ d. lb. " Arsenicalis, B.P., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb. " Arsenii Hydrochlor., P.B., 7 lbs. @ 4d. lb.; 1 lb. @ 7d. lb. " Bismuth, P.B., 6 lbs. @ 1/3 lb. " Copaiba Buchu et Cubeb., 5 lbs. @ 2/8 lb.; 1 lb. @ 3/- lb. " Easton, p.s. 1-3, B.P., 1 lb. @ 3/- lb. " Ferri Dialysatus, 6 lbs. @ 7d. lb. " Ferri Iod. p.s., 1-7, 1 lb. @ 7/10 lb. " Ferri Perchlor. Fort., P.B., 7 lbs. @ 4d. lb. " Ferri Phosph. Co., p.s., 1-7, 7 lbs. @ 1/6 lb. " Hamamelidis, B.P., 6 lbs. @ 1/1 lb. " Hypophosph. Co., p.s., B.P.C., 1 lb. @ 3/8 lb. " Iodi Fort., B.P., 5 lbs. @ 6/- lb. " Morphine Acet. or Hydrochlor., P.B., 6 lbs. @ 3/4 lb. " Opii Sed., 5 lbs. @ 4/6 lb. " Plumbi Subacet., P.B., 7 lbs. @ 3½ d. lb. " Pruni Virg. p.s., 1-7, 5 lbs. @ 2/6 lb. " Rheodas pro Syr., 1 to 7, 5 lbs. @ 1/11 lb. " Rhei p.s., 1-7, 6 lbs. @ 2/2 lb. " Santali Co., 1 lb. @ 4/- lb. " Sennæ Dulc., 6 lbs. @ 1/4 lb. " Sennæ pro Syr., 1-7, 6 lbs. @ 2/- lb. " Strychnina Hyd. P.B., 6 lbs. @ 1/6 lb. " Tolut, pro Syr., 1-7, 6 lbs. @ 1/8 lb. Naphthalene Candies or Balls, 1 cwt. @ 15/6; 56 lbs. @ 18/- cwt.; 28 lbs. @ 20/- cwt. Ol. Caryoph. Ang., B.P., 9 lbs. @ 4/11 lb.; 4½ lbs. @ 5/1 lb. Ol. Eucalypt., B.P., 1 cwt. @ 1/4½ lb.; 28 lbs. @ 1½ lb.; 9 lbs. @ 1/7 lb. Ol. Lavand. ab Flor., 5 lbs. @ 15/- lb.; 1 lb. @ 15/6 lb.</p>	<p>*Tinct. Aurantii Recens., B.P., 5 lbs. @ 3/6 lb.; bond, 8½ d. Aquos, 10d. lb. *Tinct. Belladonna, B.P., 5 lbs. @ 3/3 lb.; bond, 6½ d. Aquos, 1/2 lb. *Tinct. Benzoini Comp., P.B., 5 lbs. @ 3/7 lb.; bond, 10d. *Tinct. Camph. Comp., P.B., 5 lbs. @ 2/8 lb.; bond 6½ d. Aquos, 1/1 lb. *Tinct. Cantharidis, P.B., 5 lbs. @ 4/- lb.; bond, 6d. lb. *Tinct. Capsici, B.P., 5 lbs. @ 2/10 lb.; bond, 6d. lb. Aquos, 10d. lb. *Tinct. Card. Comp., P.B., 5 lbs. @ 2/2 lb.; bond, 7½ d. lb. Aquos, 1/- lb. *Tinct. Cinchon. Comp., B.P., 5 lbs. @ 3/2 lb. bond, 1/0½ lb. Aquos, 1/1 lb. *Tinct. Cinchon. Rub., P.B., 5 lbs. @ 3/1 lb.; bond, 10d. lb. Aquos, 1/2 lb. *Tinct. Digitalis, B.P., 5 lbs. @ 3/3 lb.; bond, 6½ d. lb. Aquos, 1/- lb. *Tinct. Gelsem. P.B., 5 lbs. @ 2/11 lb.; bond, 6½ d. lb. Aquos, 1/3 lb. *Tinct. Hyoscyami, B.P., 5 lbs. @ 3/2 lb.; bond, 7½ d. lb. Aquos, 1/5 lb. *Tinct. Iod. B.P., 5 lbs. @ 4/8 lb.; Fort. 6/- lb.; bond, 1/9 lb.; decolor., 5 lbs. @ 4/10 lb.; bond, 1/6½ lb. *Tinct. Nucis Vom., B.P., 5 lbs. @ 2/10 lb.; bond, d. lb. Aquos, 1/2 lb. *Tinct. Opii, B.P., 5 lbs. @ 5/- lb.; bond, 3/4 lb. *Tinct. Opii Aquos, 5 lbs. @ 3/- lb. *Tinct. Rhei Co., B.P., 5 lbs. @ 2/- lb.; bond, 10d. lb. Aquos, 1/- lb. *Tinct. Strophanth., P.B., 5 lbs. @ 3/10 lb.; bond, 8½ d. lb.</p>
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Minimum quantity at these prices; Home Trade, 3 Winchester Quarts assorted; Export, 12 Winchester Quarts assorted.
 NOTE.—Only terms Net Cash with order without discount, or orders accepted through London Merchants or Bankers.
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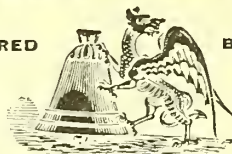
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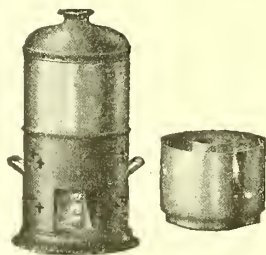
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Corbyn's **GERMICIDE.**

**Reliable, certain,
British made and
non-corrosive**

*In 1lb. tins and tins of 60 tablets.
Special prices for quantities.*

Invariably every year we have urgent calls for **Formalin Tablets and Disinfecting Apparatus**, and there is no more reliable method of thorough scientific disinfection than Formalin in the presence of moisture, and this is where Lacy's Lamp is so effectual, for Formaldehyde in this lamp is generated simultaneously with steam, thereby increasing its power of penetration, and thus rendering the germicidal action complete, and this without damage to pictures, furniture, curtains, &c.



A. Water Jacket. B. Receptacle for tablets.

For disinfecting and sterilizing Barracks, Hospitals, &c.
Large, for Barracks, Hospitals, &c. ... **52/6**
Small, for Private Houses ... **21/-**

We have a large sale for **Ext. Cascara Sagrada Liq.** guaranteed B.P. 1914 @ **1 3½** per lb., and are large manufacturers of, and well placed for :—

Infus. Gentian Co. Conc. 1-7. B. & D. Brand.
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of the principal changes in

THE BRITISH PHARMACOPOEIA, 1914.

By J. H. WILLIAMS.

A compact little book of sixty pages, printed in clear type on a tinted paper and of a size handy for the pocket.

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" " " " altered in " "
" " " " and unaltered in " "
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In each monograph we find the dose, which, in the case of articles now official, is stated in both metric and English weights and measures, the strength of active ingredients, the official requirements as to limit of ash in crude drugs, limit of lead and arsenic in chemicals, and various solubility and other tests.

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ESS VIOTTO

FOR WHITENING AND
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7/9	15/6	31/- per dozen
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VIOTTO PERFUME

14/10 28/7 55/- 103/6 198/- per dozen
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VIOTTO SOAP

Per dozen boxes of three tablets . 21/- nett
Per box RETAIL . . . 2/6

HAVANITA PERFUME

17/8 33/- 59/6 112/6 per dozen nett
2/3 4/3 7/6 14/6 per bottle

HAVANITA SOAP

Per dozen boxes of three tablets . 24/- nett
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OMAR KHAYYAM PERFUME

22/- 40/- 90/- 168/- 336/- per dozen
2/9 5/- 11/6 21/- 42/- per bottle

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Per dozen boxes of three tablets . 16/- nett
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COURVOISIER'S C.C. PERFUMES, without spirit
27/- per dozen nett 3/6 per vial RETAIL

In VIOTTO, OMAR KHAYYAM and all Floral Odours.

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BRONNLEY'S BATH TABLETS

Verbena, Lavender, Rose, Santal, Violet,
Wallflower, Lily of the Valley, Brown
Windsor, Cologne, Peau d'Espagne, Carnation,
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PER GROSS 48/- NETT

SPECIAL BONUS—1 Dozen free with 6 Dozen quantities.
2 Dozen free with each Gross.



About 7 ozs.

BRONNLEY'S BATH OVALS

(About 4 ozs.)

Verbena, Lavender, Eau de Cologne, Sandalwood, Buttermilk,
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Packed in Boxes of Twelve.

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BRONNLEY'S "BATHODOMES"

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About 7 ozs.

Verbena, Lavender, Carnation, Rose of
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SOLE MANUFACTURERS OF
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Dear Sir,

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exhibiting the reverse side of this card in your
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Your net P.A.T.A. profit on every 4/6,
2/9 & 1/1½ bottle of FREEMAN'S Chlorodyne sold
is respectively 8d., 6d. & 2¾d.

Fair, is it not ? Then why not recommend
your customers to send a bottle to their Soldier
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'THE CHEMIST & DRUGGIST,' 19th Sept. 1914,
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is, of course, purely British.'

Sir ! 'Carry on' with that enthusiasm and
determination only known to Britons.

Yours truly,

William F. Freeman.

Managing Director,
FREEMAN'S CHLORODYNE, LTD.

P.S. Have you seen our advertisement on page number
259 of 'The Chemist & Druggist Diary for 1915'?

"Sleeping out in the Trenches

at night, and getting wet through, a lot of my comrades got dysentery and pains in their stomachs. They used to be coming to me for a dose, which was the only medicine that did them any good," Writes CORPL. W. WHITTAKER, "A" Coy., 2nd Middlesex Regiment.

Wherever the British Flag is unfurled

FREEMAN'S CHLORODYNE

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THE "GLOBE" NEWSPAPER, 17th Sept., 1914, says:—"A bottle of this specific should most certainly form part of every soldier's kit."

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Send a Bottle to YOUR Boy at the Front!



*For HIS sake get FREEMAN'S
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bearing the 'Elephant' trade mark.*

There is nothing better for
COUGHS AND COLDS.

Prices: 1/1½, 2/9 and 4/6.

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Mikado Toilet Paper

In Packets and Rolls.

A quick selling, sound line for
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It will pay YOU to stock this.

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**A High-Class
6^{d.}
LINE.**



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**The softest and purest Toilet
Paper ever manufactured, and
consequently preferred to all
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**A line the Public ask for, and
insist upon having.**

**A supply of business-getting
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gratis on application to any
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at night, and getting wet through, a lot of my comrades got dysentery and pains in their stomachs. They used to be coming to me for a dose, which was the only medicine that did them any good," Writes CORPL. W. WHITTAKER, "A" Coy., 2nd Middlesex Regiment.

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**The softest and purest Toilet
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**A line the Public ask for, and
insist upon having.**

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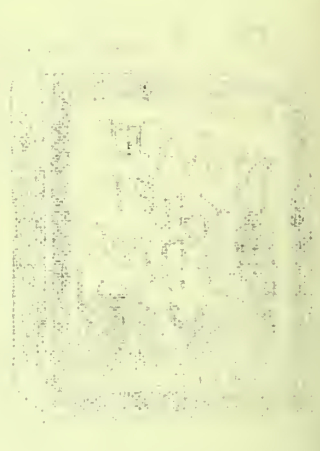
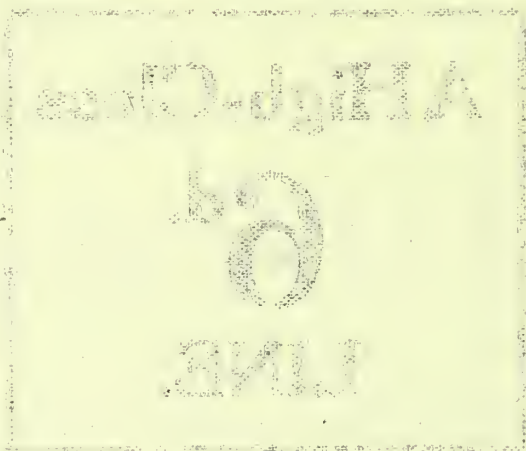
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ALL SIZES STOCKED FROM 2 TO 20 INCHES

CHEMISTS ARE INVITED

TO GIVE THESE FILTERING PAPERS A TRIAL.

THIS IS A SAMPLE OF THE **BEST SEIDLITZ BLUE** MANUFACTURED, AND A PERFECTLY FAST, SELF-COLOURED PAPER, UNAFFECTED BY ACIDS, STRONG AND RELIABLE. STOCKED IN DEMY 13, 15, 17, 23 & 27lbs. (This Sample is 17lbs.)

Ask your Sundriesman or Stationer for 633 Mill Self Blue and see that Ream Wrappers bear the Mill Label.

The X Series
Patterns in Stock.
Facing over 4,000,000 tins.

TIN BOXES

Are Manufactured
in
GREAT BRITAIN

Unless mentioned to the contrary, all these Boxes are decorated in colours in various attractive ways. Space does not admit of details of each being fully given.

IN GOLD		per gross	TOOTH POWDERS		per gross	VASELINE		per gross
0	1 x 1	1/6	X37L	Carbolic 2 x 1 1/8	4/3	X6	1 1/8 x 3/4	2/9
	1 1/2 x 1 1/2	1/9	X97L	Camphorated Chalk 2 3/8 x 1 3/8	4/3	X232	2 3/8 x 1 3/8	4/9
P	1 1/2 x 1 1/2	2/0	X90	Rose 2 3/8 x 1 3/8	4/0	X128	1 3/8 x 5/8	2/6
	1 1/2 x 1 1/2	2/3	X65	Smokers' 2 3/8 x 1	8/0	X247	1 3/8 x 1 3/8	3/3
	2 x 1 1/2	2/9	X83	Carbolic 2 3/8 x 1	6/9	X52	2 3/8 x 1 3/8	8/0
10	1 1/2 x 1 1/2	2/9	X176	" 2 3/8 x 1 3/8	4/9	X53	2 1/8 x 1 3/8	11/0
4	2 3/8 x 1 1/2	3/9	55C	" 2 1/8 x 1	6/0	X54	1 lb.	16/0
79	2 x 1 1/2	3/6	58C	" 2 1/8 x 1	7/0	X102	1 lb.	21/0
7	3 x 1	6/6	62C	" 3 x 1 1/8	9/0	CAMPHOR ICE		
4	2 1/2 x 1	5/6	X229	" 2 7/8 x 1	7/6	X7	2 x 1 1/8	2/9
9	2 1/2 x 1	7/0	X230	" 3 x 1 1/8	9/6	X120	2 3/8 x 5/8	4/9
25	3 3/8 x 1 1/2	10/0	NURSERY OINTMENT			X82	2 1/8 x 1 1/8 x 1	8/0
	2 1/8 x 1	4/6	X10	2 x 1 1/8	2/9	X181	2 1/8 x 1 1/8 x 1	8/0
	2 1/8 x 1	5/9	X94	2 7/8 x 1 3/8	4/6	X164	2 x 1 1/8	3/6
	2 1/8 x 1 1/2	6/6	X130	1 3/8 x 1 3/8	2/6	X165	1 1/8 x 5/8	2/9
	3 x 1	7/0	X224	2 3/8 x 1 3/8	3/9	ZINC OINTMENT		
	3 x 1	7/6	BORACIC OINTMENT			X60	1 3/8 x 5/8	2/6
ROLEUM JELLY			X159	1 3/8 x 1 3/8	2/6	X197	2 x 1 3/8	2/9
CG	1 1/8 x 3/4	2/9	X212	2 x 1 3/8	2/9	X213	2 x 1 3/8	2/9
2	1 lb.	18/0	X212L	2 3/8 x 1 3/8	4/0	X213L	2 1/8 x 5/8	4/0
7	1 lb.	21/0	X262	1 3/8 x 1 3/8	2/3	X261	1 3/8 x 5/8	3/3
CREAM			X314	2 x 1 3/8	2/6	X315	1 1/8 x 1 1/8	2/6
	1 3/8 x 1 3/8	2/3	COCOA NUT OIL			INDIAN CERATE		
	1 3/8 x 1 3/8	2/3	X11	2 x 5/8	2/9	X145	1 3/8 x 5/8	2/6
	1 3/8 x 1 3/8	2/6	X200	3 3/8 x 1 1/8	4/0	CHILBLAIN OINTMENT		
	2 x 1 1/8	2/9	X200	3 3/8 x 1 1/8	12/0	X126	1 1/8 x 5/8	2/9
	1 3/8 x 1 3/8	2/3	COMPOUND LIQUORICE POWDER			EYE OINTMENT		
	1 3/8 x 1 3/8	2/6	X26/2	2 1/8 x 1 1/8	8/0	X33	1 1/8 x 1/2	2/3
SALVE			X26	2 3/8 x 3 3/8	9/0	RINGWORM OINTMENT		
	1 1/8 x 1 3/8	2/3	GREEN ENAMELLED, FOR OINTMENTS			X151	1 3/8 x 5/8	2/6
MADE			X320	1 1/8 x 1 1/8	3/9	"THE" OINTMENT		
	1 1/8 x 3/4	3/0	X320L	2 1/8 x 1	7/6	X255	2 x 3/4	2/9
SE POWDER			VENICE TURPENTINE			CONFECTION OF SENNA		
	3 1/4 x 5 1/8	23/0	X158	1 1/8 x 1 1/8	2/6	X277	2 x 5/8	2/9
ROOM POLISH			MARSHMALLOW OINTMENT			CARBOLIC DISINFECTANT		
	2 1/2 x 4 1/2	24/0	X280	1 1/8 x 1 1/8	2/6	X49	3 1/8 x 7 1/2	28/0
ET POWDER			BROMPTON LOZENGES (Oblong)			MENTHOL SNUFF		
	2 x 3	8/6	X245	1 oz.	8/0	X105	1 1/8 x 3/4	2/3
	2 1/2 x 3 1/2	14/0	X245L	2 oz.	10/0	X219	1 1/8 x 3/4	5/0
S	2 3/8 x 2 3/8	13/6	PINE TREE LOZENGES (Oblong)			FULLER'S EARTH		
	2 3/8 x 3 3/8	18/0	X252	...	12/0	X71	2 1/8 x 2 3/8	8/6
CT POWDER			MENTHOL AND EUCALYPTUS SNUFF			X149	2 3/8 x 3 3/8	14/0
	1 1/8 x 2 3/8	8/0	X251	...	5/0	BATH SALTS, for Rheumatism		
L	2 1/2 x 3 3/8	11/0	CAPSULE TIN			X317	2 1/8 x 3 3/8	12/0
ain tins	...	6/6 & 9/6	X25	White enamel 2 3/8 x 1 1/8	7/0	FURNITURE PASTE (Royal Oak)		
ese tins fill from the bottom			PELLET TIN (Hinged)			X9	1 1/8 x 5/8	2/9
I have a perforated fixed top.			X31	1 1/8 x 1 1/8	4/6	BRITISH LANOLINE		
POWDER (Dredger Top)			X31P	1 1/8 x 1 1/8, labelled Chlorate of Potash	6/0	X112	2 x 3/4	2/9
	1 1/8 x 2 3/8	8/0	X31B	1 1/8 x 1 1/8, labelled Chlorate of Potash and Borax	6/0	LOZENGE TINS (Plain)		
	2 1/2 x 3 3/8	12/0	IRON TONIC PILLS (Dr. Blaud)			X300	1 oz. } hinged, round	7/3
R OF MILK			X38P	Cannister shape 1 1/8 x 2 1/8	6/9	X301	2 oz. } corners, indented	9/0
	1/2 lb.	15/0	X38W	Cannister shape 1 1/8 x 2 1/8	6/9	X308	4 oz. } lids for labels	12/6
UM POWDER			SEIDLITZ POWDERS			X267	Oblong, round cornered	
	Plain gold, for labelling	18/0	X240	4 5/8 x 3 1/8 x 1 1/2	16/6	Tin for Pine Pellets, etc.		
	Decorated	24/0	X240	" plain tin	14/6	3 3/4 x 1 1/2 x 1/2		
	Large 1-lb. tin, with brass		ASTHMA POWDER (Lever Lid)			X260A	3 3/8 x 2 3/8 x 1 1/8	7/6
	ne cover, elaborate decoration	per doz. 5/0	HYGEIA SALTS			X313	Round cornered lever lid	12/6
	also be had worded Violet							
	nder.							

For the Whitecross Ointment Tins see Overleaf.

Harley Brothers, Ltd., Whitecross Works, London, E.C.

The **WHITECROSS OINTMENT TINS** are fast becoming recognised as the Series, being absolutely Reserved for Pharmacists. Design, what make requested. These tins are various in depth, in accordance with costs of the various ointment, so as to enable them all to be sold at one price. Buyers of these tins guarantee to fill with preparations according to the British Pharmacopœia, where such standard is necessary, the tins being sold on this condition.

X344, Boracic Ointment ...	2/9	per gross, net	X352, Cold Cream... ..	2/9	per gross, net
X345, Zinc " " " "	2/9	" " "	X353, Lanoline " " " "	2/9	" " "
X346, Carbolic " " " "	2/9	" " "	X354, Resin Ointment " " " "	2/9	" " "
X347, Sulphur " " " "	2/9	" " "	X355, Chesebrough Vaseline " " " "	2/9	" " "
X348, Healing " " " "	2/9	" " "	X358, Yellow Basilicon Ointm't	2/9	" " "
X349, Honey and Borax ...	2/9	" " "	X359, Camphor Ice " " " "	2/9	" " "
X350, Gall Ointment " " " "	2/9	" " "	X360, Cocoa Nut Oil " " " "	2/9	" " "
X351, White Precipitate Ointm't	2/9	" " "			



1 gross in a carton. 10 gross lots assorted, 2/6 net. 3d. per gross extra if packed $\frac{1}{4}$ gross in a box.

2d. SIZES of above, as under :

X344L, Boracic Ointment ...	4/6	per gross, net	X359L, Camphor Ice ...	4/6	per gross, net
X345L, Zinc " " " "	4/6	" " "	X355L, Vaseline " " " "	4/6	" " "
X346L, Carbolic " " " "	4/6	" " "	X353L, Toilet Lanoline " " " "	4/6	" " "
X352L, Cold Cream " " " "	4/6	" " "			

HEALTH SALT TINS

X28 Ship design ...	4 oz.	10/0
X41 Fruit " " " "		10/0
X227 Plain, neat design ...		10/0
X286L Pretty blue " " " "	8 oz.	14/0

Also Patent Tin, air tight, for large users, filled by machine. Particulars on application.

"OWN NAME" OINTMENT TINS

"XLCR" Round bottom.
(Registered)

25 gross and upwards supplied with buyers own name on tin round the rim, and name of ointment in centre, with various depths of body. Full particulars on application.

WHITECROSS OINTMENTS (B.P., etc.).—Manufactured by specially devised machinery of our own design by which the ingredients are evenly distributed, yet an article is produced resembling flossed silk. Prices in bulk on application. Packed in tins as below. Also packed in Collapsible Tubes—the most cleanly and sanitary package possible. Put up $\frac{1}{2}$ gross in hanging box :

	1d. Tins.	2d. Tins.	4 x 1 Tubes.	5 x $\frac{1}{4}$
Ung. Acid Boric ...	*7/- Net per Gross	15/6	2/3	3/3
" " " Flav... ..	6/6	14/-	2/-	3/-
" Zinc " " " "	*8/- Net	17/6	2/9	4/-
" Acid Carbolic " " " "	7/9	15/-	2/6	3/6
" Resinae " " " "	9/6	—	2/9	4/-
" Sulphuris " " " "	9/-	—	2/9	4/-
" Gallae " " " "	9/3	—	3/-	4/6
" Hyd. Ammon. " " " "	9/-	—	—	—
" Healing " " " "	6/6	—	2/3	3/3

* With the exception of the 1d. Boracic and Zinc, these prices are subject to discount according to quantity. Chemists' own formula prepared strictly according to recipe

We also draw special attention to our high-class OTTO OF ROSE COLD CREAM.

The price in bulk for which is 1/- per lb. net. We also make a second quality, No. 2 at 9d. per lb. net. The No. 1 is packed in Whitecross Tins at 8/- and 17/- per gross respectively, and in Tubes, 4 x $\frac{3}{4}$ at 2/-, 4 x 1, 2/6, 5 x $1\frac{1}{4}$, 3/9 per dozen.

THE WHITECROSS CARBOLIC TOOTH POWDER

A High-Class Powder in a sweetly Decorated Tin.

1/9 and 3/3 per dozen. 1d. samples, 8/- gross.



THE WHITECROSS TOOTH PASTES

in Collapsible Tubes.

Cherry, Carbolic, Areca Nut, White Rose, Thymol, etc.

Packed $\frac{1}{2}$ doz. on card.

4 x $\frac{3}{4}$... 2/- 4 x 1 ... 2/6.
5 x $1\frac{1}{4}$... 4/- per doz.

THE WHITECROSS BABY POWDER

A first-class preparation, packed in elaborate round-cornered tins with dredger tops.

On the P.A.T.A. ... 6d.

4/- doz., 3 doz., 3/9, 6 doz., 3/7

Gross Lots, 39/-



"ANGLOPIRIN"

[Registered Trade Mark].

Compressed Tablets of Acetylsalicylic Acid, as the name implies - British owned and British compressed.

Prices fixed on the P.A.T.A. ... at 9d. per 25; 1/3, 50; 2/3, 100.

Smartly packed, each in a carton—

Prices to the trade 5/6 25 doz.; 8/6 50 doz.; 17/- 100 doz.

SPECIAL BONUS SCHEME.

With 3 doz. small we will give $\frac{1}{2}$ doz. free. 3 doz. cost 16/6, 3 $\frac{1}{2}$ doz. realize 31/6 - 15/- profit on an outlay of 16/6.

With 2 doz. medium we will give $\frac{1}{2}$ doz. free. 2 doz. cost 17/-, 2 $\frac{1}{2}$ doz. realize 35/- - 18/- profit on an outlay of 17/-

With 1 doz. large we will give $\frac{1}{2}$ doz. free. 1 doz. cost 17/-, 1 $\frac{1}{2}$ doz. realize 31/6 - 14/6 profit on an outlay of 17/-

SHOW CARDS SUPPLIED.

The "Anglopirin" Tablet rapidly disintegrates and compares favourably with anything ever put on the market. Support British industry and displace German products by the English, especially as such a handsome profit is provided for.

Shirley Brothers, Ltd., Whitecross Works, London, E.C.

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Whenever Possible.ORGANO-
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Manufacturing Chemists.

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NOTABLE BRITISH PRODUCE

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{ All strains guaranteed from - Primary
Virulent Cultures. *Descriptive litera-
ture on application.*

no-therapeutical Preparations

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of
{ Cerebral Substance, Duodenal, Lym-
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Substance, Orchitic, Ovarian, Pancreas,
Pituitary, Prostate, Suprarenal,
Thymus, Thyroid, &c. *Full litera-
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Biologically Standardised
Preparations

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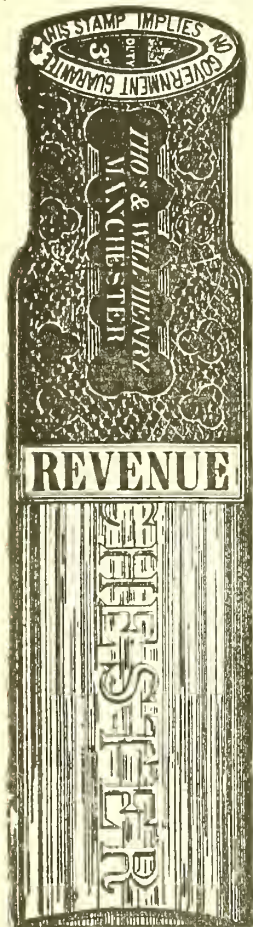
of
{ Digitalis, Ergot, Squills, Strophanthus,
Suprarenal, Vaso-Constrictine.

DUNBURGH
& LONDON

148 FARRINGTON ROAD.

ESTABLISHED A.D. 1772.

HENRY'S CALCINED MAGNESIA.



For HEARTBURN, HEADACHE, GOUT,
BILIOUSNESS, ACIDITY OF THE
STOMACH, TRY

Henry's Calcined Magnesia

FREE FROM TASTE, SMELL OR
ROUGHNESS TO THE PALATE.

ADULTS.

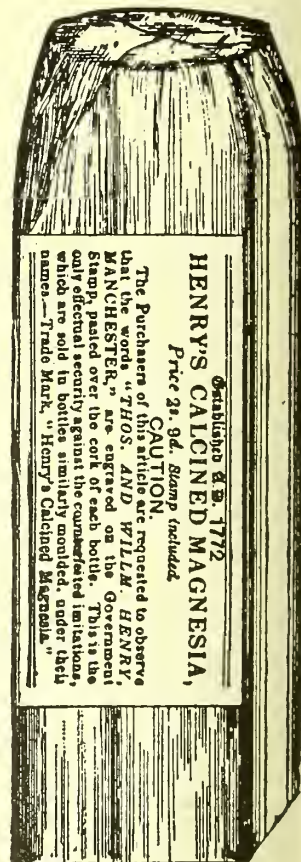
A Safe Aperient for the most delicate constitutions.

CHILDREN.

May be given to children in early infancy. The addition of a small quantity of the Magnesia prevents milk turning sour on the stomach.

MESSRS. THOMAS and WILLIAM HENRY, of Manchester, England, beg to inform the Trade generally that they continue to manufacture their old-established "CALCINED MAGNESIA" in the Greatest Chemical Purity, and also wish to warn Buyers against the numerous spurious and very inferior imitations offered in various foreign countries.

For the guidance of the Trade they submit facsimiles of their Bottle, wrapped and unwrapped.



Established A.D. 1772
HENRY'S CALCINED MAGNESIA,
Price 2s. 9d. Stamp included.

CAUTION.
The Purchasers of this article are requested to observe that the words "THOMAS AND WILLIAM HENRY, MANCHESTER" are engraved on the Government Stamp, pasted over the cork of each bottle. This is the only official security against the counterfeited imitations, which are sold in bottles similarly moulded, under their name—Trade Mark, "Henry's Calcined Magnesia."

THE LABELS CAN BE HAD IN ENGLISH, SPANISH, PORTUGUESE, OR ITALIAN

Messrs. HENRY will be pleased to hear from Merchants who are suspicious of any Stock in their possession.

THE MAGNESIA MAY BE HAD THROUGH ALL WHOLESALE HOUSES.

Registered Trade Mark:—"HENRY'S CALCINED MAGNESIA."

Messrs. THOMAS & WILLIAM HENRY, 11 East Street, St. Peter's, MANCHESTER.

Five seconds by the Watch



PHARMACISTS do well to be particular as to the character of the hypodermic tablets they sell. A tablet that dissolves promptly and thoroughly is essential. Mere disintegration will not suffice. Many hypodermic tablets "go to pieces" in water—fine, undissolved particles settling to the bottom. Such tablets are worthless in an emergency.

PARKE, DAVIS & Co.'s HYPODERMIC TABLETS

dissolve freely and fully, forming a clear solution, without residue. *Test one by the watch!* Drop the tablet into a syringe partly filled with lukewarm water. Shake vigorously. In five seconds (or less) it will have dissolved completely. *Try it!*

PARKE, DAVIS & Co.'s HYPODERMIC TABLETS

are made from *standardised drugs* only, by a process which ensures absolute accuracy of dosage and the exclusion of impurities and germ infection.

A selection from the list of PARKE, DAVIS & Co.'s Hypodermic Tablets.

Aconitine, gr. 1-120.
Adrenalin, gr. 1-65 and 1-200.
Adrenalin and Cncaine.
Adrenalin and Eucaine.
Apomorphine Hydrochloride,
gr. 1-20 and 1-10.
Apomorphine and Strychnine.
Atropine (alkaloid), gr. 1-150 and 1-60.
Atropine Sulphate, gr. 1-200, 1-150,
1-120 1-100, 1-60 and 1-50.
Atropine and Strychnine.
Beta-Eucaine Hydrochloride, gr. 1-4.
Caffeine, gr. 1-2.
Cocaine Hydrochloride,
gr. 1-8, 1-6, 1-4 and 1-2.
Cocaine, gr. 1-8.
Codeine Phosphate, gr. 1-4 and 1-2.
Cocinchine, gr. 1-30.
Conine Hydrobromide, gr. 1-8.
Corrosive Sublimate, gr. 1-1-0, 1-50
and 1-30.

Digitalin, gr. 1-100 and 1-10.
Digitalin and Strychnine.
Ergotinine Citrate, gr. 1-100.
Heroin Hydrochloride, gr. 1-24, 1-12
and 1-6.
Hyoscine Hydrobromide, gr. 1-200
and 1-100.
Hyoscine and Morphine.
Hyoscine Compound (*Hyoscine*,
Atropine and Morphine).
Hyoscyamine, Pure, gr. 1-100 and 1-50.
Local Anæsthetic (Dental)
(*Cocain*, *Morphine and Atropine*).
Morphine Hydrochloride, gr. 1-8, 1-4
and 1-2.
Morphine Meconate, gr. 1-6, 1-4 and 1-3.
Morphine Sulphate, gr. 1-12, 1-8, 1-6,
1-5, 1-4, 1-3, 3-8 and 1-2.
Morphine and Atropine
(*fifteen different combinations*).
Morphine and Strychnine.

Morphine Tartrate, gr. 1-4.
Nitroglycerin, gr. 1-200 and 1-100.
Nitroglycerin, Digitalin and Strychnine.
Nitroglycerin and Strychnine.
Physo-stigmine Sulphate, gr. 1-100.
Picrotoxin, gr. 1-50.
Pilocarpine Hydrochloride, gr. 1-8,
1-6 and 1-3.
Pilocarpine Nitrate, gr. 1-4 and 1-3.
Quinine Acid Hydrochloride, gr. 5.
Quinine and Urea Hydrochloride,
gr. 7-10 and 2.
Scopolamine Hydrobromide, gr. 1-100.
Scopolamine and Morphine.
Sodium Arsenate, gr. 1-10.
Sparteine Sulphate, gr. 1-30, 1-10
and 1-4.
Strychnine Nitrate, gr. 1-100, 1-60,
1-40 and 1-20.
Strychnine Sulphate, gr. 1-150, 1-100,
1-60, 1-50, 1-40, 1-32 and 1-30.

For formulae of the compound tablets, also prices and packages, see price list.

PARKE, DAVIS & Co. LONDON. W.

ALFRED WHITE & SONS,

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Manufacturing & Export Chemists.

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is now Unobtainable. We are makers of PURIFIED and HYDRATED WOOL FAT to which we have given the distinctive name of "LANADEPS." Good Colour, Free from Smell, Splendid Ointment Base.

1 lb.	1/10 lb.	7 lbs.	16 lb.
4 lbs.	1 8	14 and 28 lbs.	14 "
	1 cwt. keg, 1/2 lb.		

SAMPLES FREE UPON APPLICATION.

Howard Lloyd & Co., Ltd., Manufacturing Chemists, Leicester.

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FROM CHEMICALLY AND PHYSIOLOGICALLY TESTED DRUGS

Willows, Francis, Butler & Thompson, Ltd.,
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THE WAND MANUFACTURING CO.

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PILLS, TABLETS, CAPSULES.

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ALL GOODS AT LOWEST POSSIBLE PRICES.

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Special Quotes to Large Buyers.



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PRIZE MEDALS AWARDED U.S.



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**MORPHINE
AND
SALTS.**

—
**Codeine
and
Salts.**

—
Caffeine

—
Strychnine

—
Capsicin

—
Gingerin

—
Salicin

Have built up
their reputation
for the refined
Chemicals, Alkaloids
and Glucosides
used in pharmacy
by strict analytical
control and constant
improvement in
technical processes.

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PURE,
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—
Cantharidin

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Ergotin

—
**Jalap
Resin**

—
**Scammony
Resin**

—
Aloin

—
Podophyllin

**GRAND PRIX,
PARIS, 1900.**

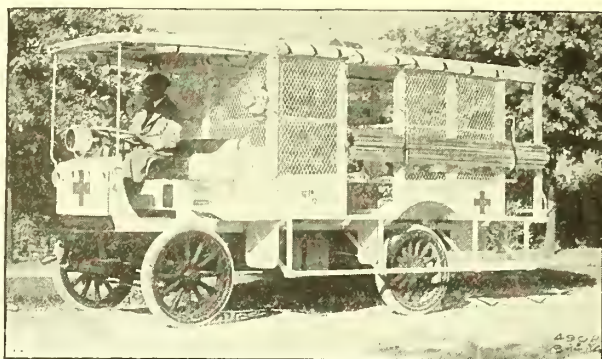
**GRAND PRIX,
BRUSSELS, 1910.**

**GRAND PRIX,
LONDON, 1908.**

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BLANDFIELD WORKS

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GLASGOW
37 WASHINGTON ST.



Canadian Red Cross Ambulance Car.

This Field Ambulance was equipped with the Biological Products of H. K. Mulford Company

and

Bismuth - Formic - Iodide Comp. Powder Mulford

Awarded the Gold Medal for Biological Products

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Bismuth - Formic - Iodide Comp.

(Dry Surgical Dressing).

An effective antiseptic, astringent, dry dressing for all wounds, cuts, sores, etc.

SAMPLES ON REQUEST.

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Read, Holliday & Sons, Ltd.

HUDDERSFIELD, ENGLAND,

beg to announce to the trade that they manufacture

Acetyl Salicylic Acid Sodium Salicylate

Sulphonol

Trional

Salol

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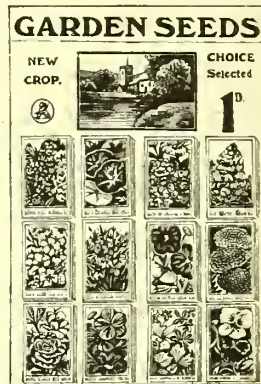
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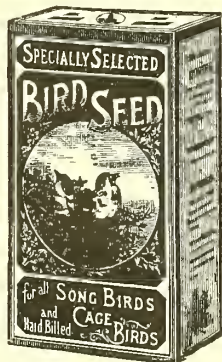
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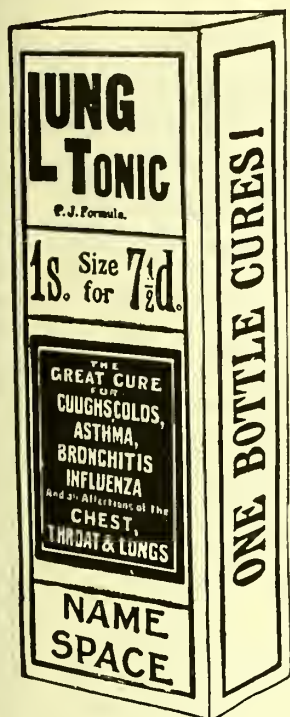
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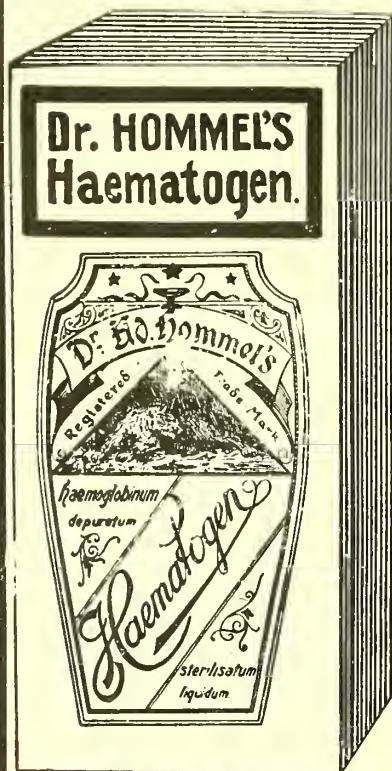


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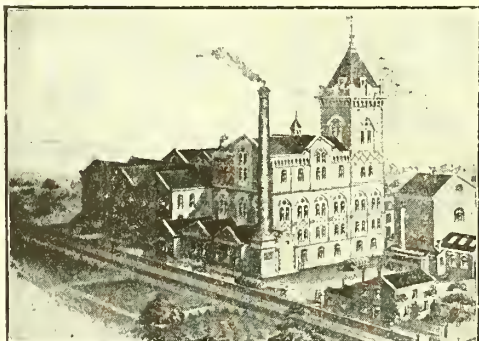
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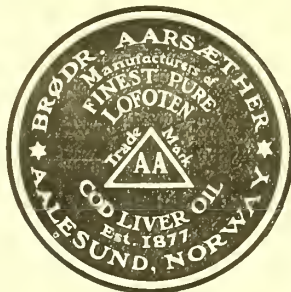
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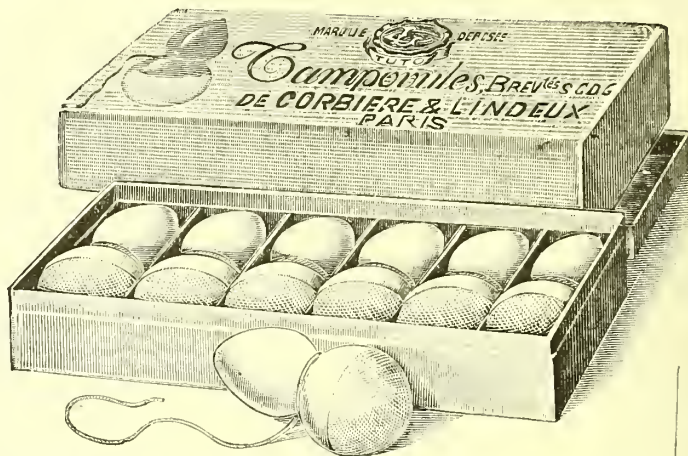
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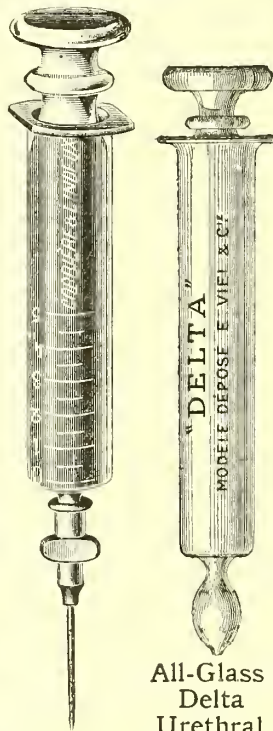


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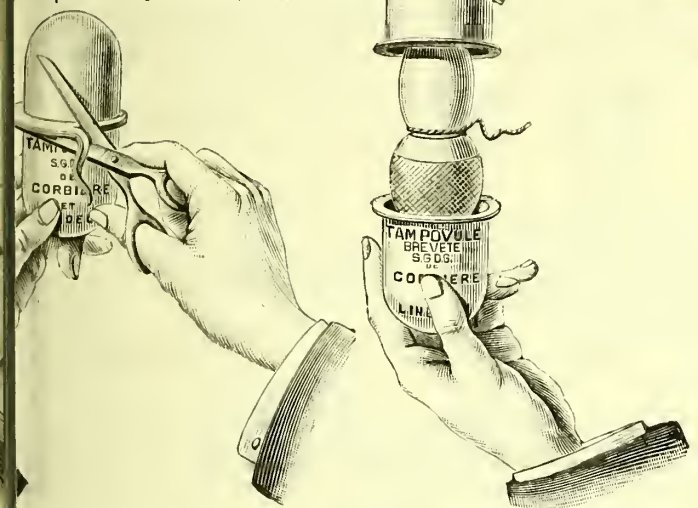
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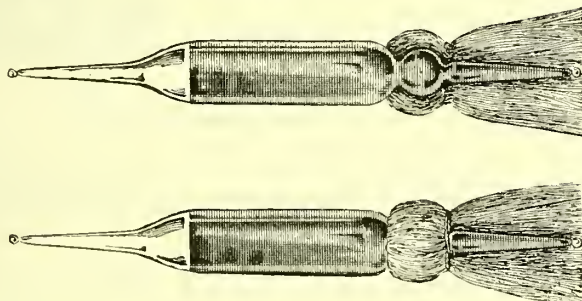
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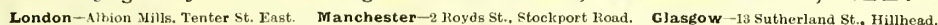
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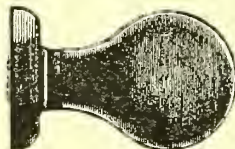
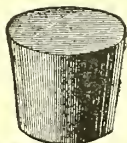


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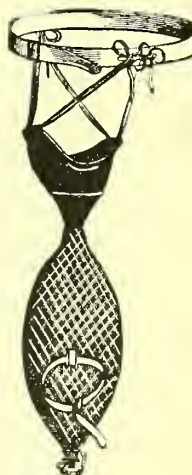
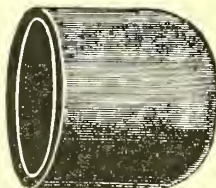


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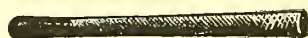
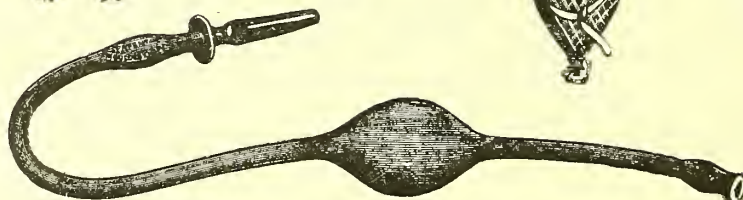
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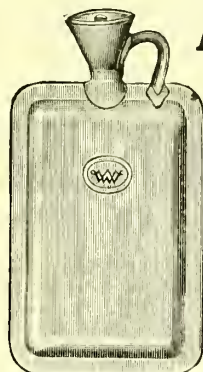
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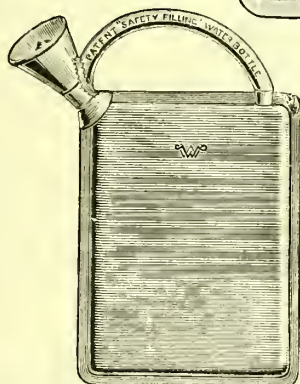


Handle.

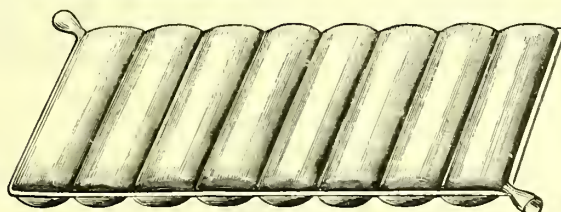


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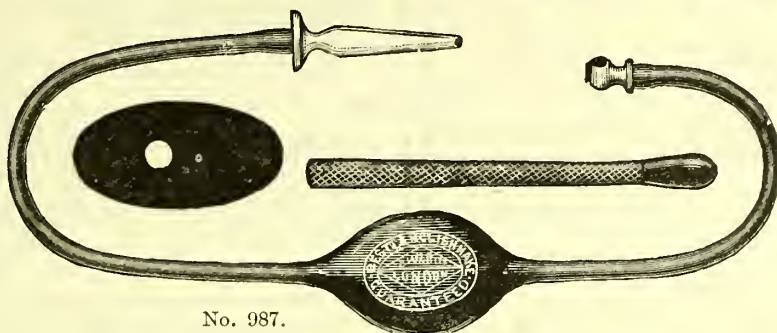
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Guaranteed for 2 years.



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			s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
Heavy weight	...	each	2	9	3	0	3	3	3	5	3	9	4	3	4	6	4	10
Light	2	8	2	10	3	1	3	3	3	6	3	11	4	2	4	5
Cockburn’s shape	2	9	3	0	3	3	3	6	3	10	4	3	4	6	4	10
Covers, scarlet or grey plush	0	7	0	7	0	9	0	9	0	10	0	10	0	10	0	11
“	“	“	0	5	0	5	0	6	0	6	0	7	0	7	0	8	0	10

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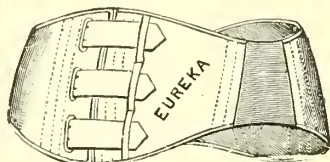
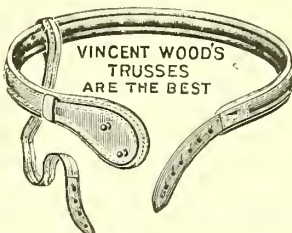
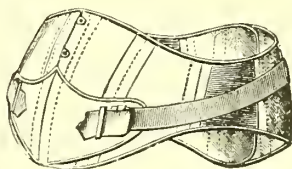
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Fig. 957.—Side Handle.

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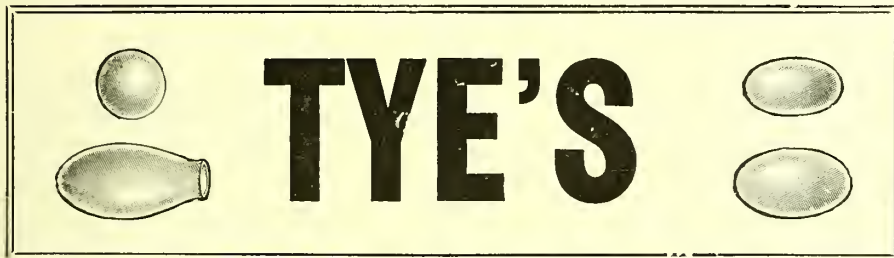
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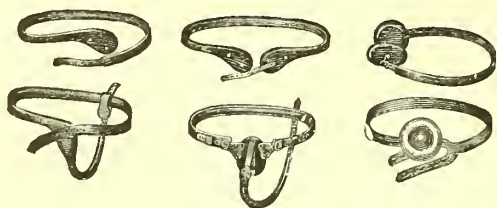
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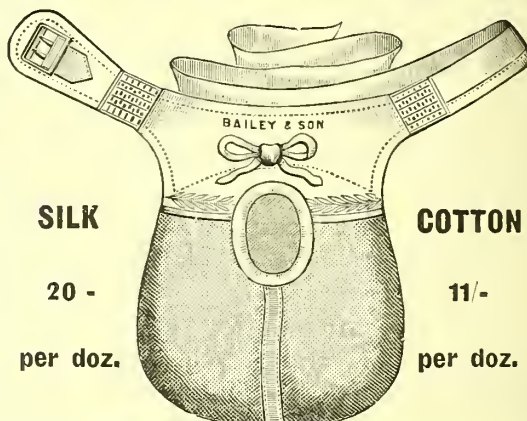
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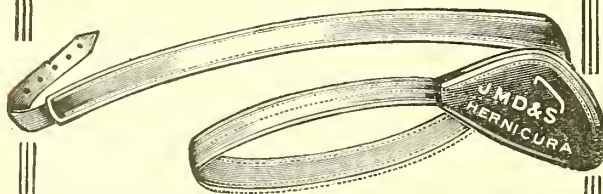
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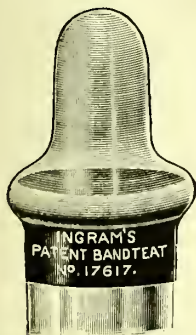
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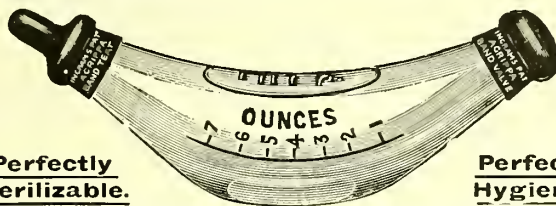
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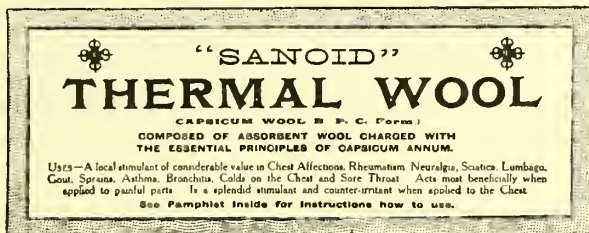
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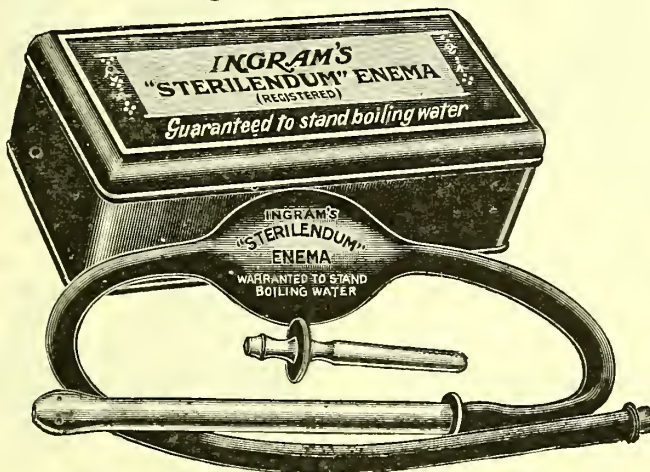
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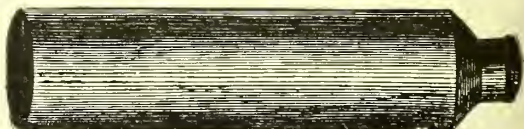
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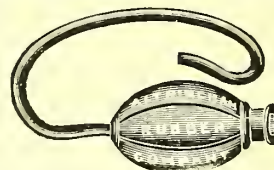


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7/10/14

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We are swarming with rats, and I would like to give "Rodine" a trial. Please send me two or three tins when I will remit at once.

Yours, etc.,

(Signed) THOMAS ATKINSON.



Lawns Farm, Lealholm,
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15/12/14

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Requires no shaking down. *Guaranteed Accurate.*
A 30-Second Pushed back in an instant.
Send for list, post free.

Good Selling
Lines for
Chemists



Showing flattened
bulb at end.

G. H. ZEAL, 82 Turnmill St., LONDON, E.C.

Wholesale Manufacturer of

CLINICAL THERMOMETERS.

A SELECTION OF 50 KINDS.

Established 1888.

Telephone No. 12438 Central.

A TONIC NERVE FOOD. Tried and not found wanting.

READE'S VIVADONE

(BRITISH MADE)

In Tins—1/9, 3/6, and 5/6 each, with good profit
to Retailer. Ask your Patent House for this.

READE BROTHERS & CO., LTD., WOLVERHAMPTON.

"LINSEED COMPOUND"

REGD. TRADE MARK OF
KAY'S COMPOUND ESSENCE OF LINSEED.
(Now upon the P.A.T.A.)

The above is a well-advertised remedy
of over 40 years' proven efficacy for
the relief of COUGHS and COLDS.

Supplied by all the Wholesale Houses in London and the Provinces.

ALSO MAKERS OF

"KAY'S TIC PILLS."

**MOUNTAIN FLAX ('Linum Catharticum')
PILLS.** Trade Mark.

"CHLORO-LINSEED" COUGH LOZENGES.

"COAGULINE,"

Transparent Cement for broken articles. 6d. bottles.

"TENASITINE,"

A Liquid Cement in Tubes, 1d., 2d., 3d. and 6d.

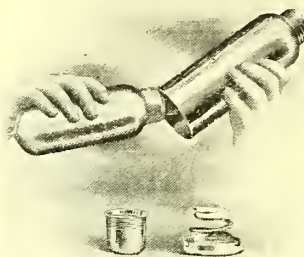
"KLINX,"

Hydraulic Cement (heatproof), 6d. Tins.

KAY BROTHERS, LIMITED, STOCKPORT, England.

Telegrams: "Kay Stockport."

Telephone: 247 Nat.



Every bottle
tested before
leaving works.

Equal in thermal
qualities, looks
and finish to any of
the higher-priced
flasks, and supe-
rior in construc-
tion.

The CALORIS IS THE BEST VACUUM FLASK ON THE MARKET.

- ¶ Note the shock-absorbing spring support.
- ¶ Note also the safe position of the glass pip.

Easiest to take apart and put together.

* * *

LANDAU & CO. 2 Orchard St., LONDON, S.W.
WESTMINSTER,

HARVEY'S GREAT REMEDIES FOR THE HORSE WITH THE ADDED REMEDIES. (Protected Prices.)

HARVEY'S ACONITE POWDERS.

For Chronic Cough, Broken Wind, Roaring, &c.

HARVEY'S WORM AND CONDITION POWDERS.

HARVEY'S WATTS' EMBROCATION, or Curb Bottle.

HARVEY'S WATTS' RED LOTION.

For Wounds.

HARVEY'S HAIR RESTORING OINTMENT.

HARVEY'S EDOS, or Tasteless Purging Powder.

THE ADDED REMEDIES:

HARVEY'S KOPPOS POWDER.

For Lymphangitis, or Weed, and Inflammations
generally. In Tins, 5/- and 10/- each.

HARVEY'S THRUSH SPECIFIC.

In Tins 1/9 and 3/- each.

HARVEY'S HOOF OINTMENT.

In Tins, 3/- and 6/- each.

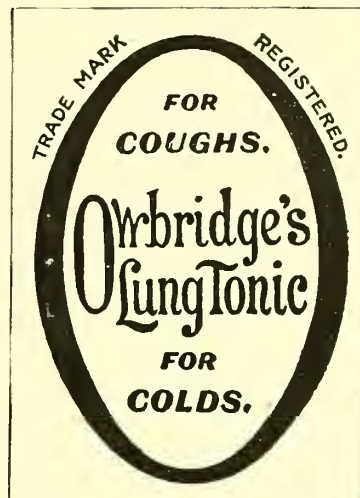
Also

HARVEY'S HAIR RESTORER (HUMAN).

A successful modification of the Veterinary Prepara-
tion. In Pots, 2/- each.

The REMEDIES may be obtained of all the leading Druggists'
Sundries Houses.

HARVEY & COMPANY, LTD., DUBLIN.



There is only one

Owbridge's Lung Tonic

and it bears a Registered Trade Mark as above.

Keep to Owbridge's Lung Tonic
—it is the standard Cough Mixture
and is known to all the World.

**O. L. T. has a Great Reputation
earned by Merit.**

**The Great British Public know it
and believe in it from experience.**

Stock it—Sell it—Please your Customer and add to your own profits.

*We have some beautiful Show-
cards and other Advertising
Matter. Let us send you some.
Send us Trade Card.———*

**W. T. OWBRIDGE, Ltd.,
The Laboratory,
HULL.**



OAKEY'S WELLINGTON KNIFE POLISH.

THE ORIGINAL & ONLY GENUINE PREPARATION.

PREPARED EXPRESSLY FOR OAKEY'S KNIFE BOARDS.

All Patent Knife Cleaning Machines, and Rubber and Buff Leather Knife Boards

Knives constantly cleaned with it have a brilliant polish equal to new cutlery, and are not injured as they are when common imitations of Oakey's Knife Polish or when Bath Brick are used.

Canisters, 1d., 2d., 3d., 6d., 1s., 2s. 6d., 4s. each.

Oakey's "Wellington" Knife Boards.

The best and cheapest articles ever introduced to the Public, for expeditiously and brilliantly polishing Knives. Made in all sizes. Oakey's "Wellington" Knife Board should be used with the boards.

Oakey's "Wellington" Silversmiths' Soap.

The best and cheapest article for cleaning and polishing without waste or dirt, Silver, Electro-Plate, Britannia Metal, Tin, Zinc, Plate Glass, Marble, Gas Globes, Lustres, Windows, &c. Tablets, 6d. each.

Oakey's "Wellington" Black Lead.

Imparts an immediate, brilliant, and lasting polish to all kinds of Stoves, Ironwork, &c. No WASTE, DIRT, or DUST in the use—adheres at once to the stove. Solid Blocks, 1d., 2d., and 4d. each, and 1s. Boxes.

Oakey's "Nelson" Black Lead.

In Circular Polished Blocks, $\frac{1}{2}$ d. and 1d. each; packed also in fancy boxes at 6d. each, containing 1 doz. $\frac{1}{2}$ d. blocks or $\frac{1}{2}$ doz. 1d. blocks.

Oakey's "Polybrilliant" Metal Pomade.

(REGISTERED.)

A magic Pomade for cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes. Tins, 1d., 2d., 3d., and 6d. each.

Oakey's "Polybrilliant" Metal Powder.

(REGISTERED.)

Produces a most exquisite polish on Brass, Copper, Tin, &c. In fancy Boxes, 6d. and 1s. each.

Oakey's "Wellington" Furniture Cream.

For cleaning and polishing Furniture, Patent Leather, Oilcloth, &c. Bottles, 6d. and 1s. each.

Oakey's "Wellington" Brunswick and Berlin Black.

For beautifying and preserving Stoves and all kinds of Ironwork. Bottles, 6d., 1s., and 2s. each; and $\frac{1}{2}$ and 1 Gallon Cans.

Oakey's Genuine Emery Cloth.

The best and most economical for all purposes. Each sheet of this quality is stamped "OAKEY'S GENUINE."

Oakey's "Flexible" Glass Paper.

Unequalled for Strength and Durability. Each sheet is Warranted and Stamped "OAKEY'S."

Flint and Garnet Sand Papers.

In Sheets and Rolls, for Machine use.

JOHN OAKEY & SONS, LIMITED

Manufacturers of Emery, Emery and Glass Cloths, Glass, Emery and Flint Papers, Black Lead, Knife Boards, Pumice, Putty Powder, Crocus, Rouge, Plate Powder, Furniture Polish, Brunswick and Berlin Black, &c.

AGENTS FOR THE SALE OF SCOTCH, TOWN, FRENCH, AND OTHER GLUES.

Werlington Emery and Black Lead Mills, Westminster Bridge Road, London, S.E.

SEABURY'S

ABSORBENT COTTONS

PLAIN AND MEDICATED

SEABURY'S SUPERFINE
QUALITY \diamond ABSORBENT
-THE FINEST PRODUCED
USED EXCLUSIVELY BY
THE LEADING SURGEONS

SEABURY'S REGULAR
ABSORBENT - AN
EXCELLENT COTTON
FOR HOSPITAL AND
GENERAL SURGICAL
PURPOSES.

Specify  *Seabury's*

1 oz.

1 oz.

2 oz.

2 oz.

4 oz.

4 oz.

8 oz.

8 oz.

16 oz

16 oz.

NOTE FOR PRICE LIST, POST FREE FROM:-

SEABURY & JOHNSON, 86 Clerkenwell Road, London, E.C.

May, Roberts' Traveller.

No. 4023 CITY.

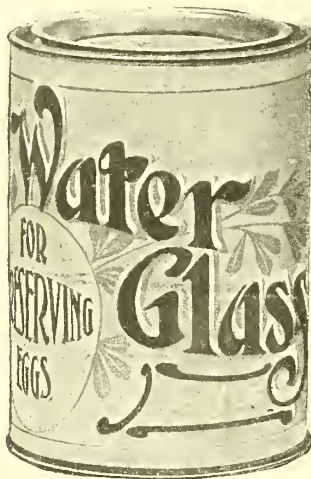
JANUARY 30, 1915.

LONDON & DUBLIN.

EDUCATING THE PUBLIC.

Although many hundreds of tons of Water Glass are now used annually by private persons in preserving eggs, there is still a large section of the public that does not realise the ease and success of the process.

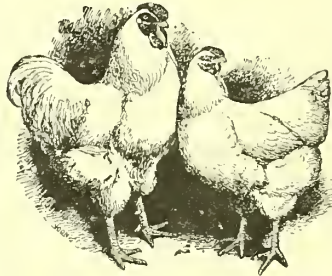
It is entirely a matter of education, and any chemist who will talk to his customers on the subject is certain of a very profitable return for his trouble.



"Seeing is believing" all the world over, so we suggest to our friends for counter display a glass vessel containing an egg in Water Glass as an ocular demonstration of Egg Preserving, which will invite questions and give the opportunity for recommendation.

We send out an attractive show-card with all opening orders for six dozen drums assorted, and we are also prepared to supply a quantity of explanatory illustrated counter bills, printed with chemist's own name and address, with all such orders and subsequent ones for a like amount.

EGG PRESERVING.



WATER GLASS

(140° Twaddell).

MAY, ROBERTS' PRICES.

1 lb. size	...	2/6	per doz.
3 doz. lots		2/4	"
6 "		2/3	"
12 "		2/2	"
2 lb. size	...	3/8	"
3 doz. lots		3/7	"
6 "		3/6	"
12 "		3/4	"
4 lb. size	...	6/6	"
3 doz. lots		6/4	"
6 "		6/2	"
12 "		5/10	"
7 lb. size	...	10/-	"
3 doz. lots		9/6	"
6 "		9/-	"
12 "		8/8	"

5% Discount.

Usual Carriage Paid Terms.

Lever-lid drums with attractive varnished label in colours.

May we send you a Sample?

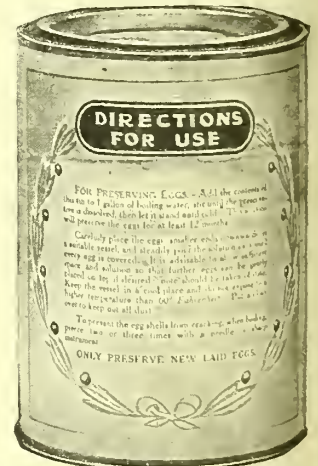
ECONOMICS.

Put popularly, it works out this way:—

Say the chemist sells a one-pound drum for fourpence—when, by the way, he will make about 85% on the cost price—and the housewife buys the eggs when they cost a penny each and keeps them until they are worth twopence each, then—

1 lb. Water Glass	...	s. d.
100 Eggs	...	0 4
		8 4
		8 8

Instead of 100 Eggs at 2d. 16 8
A saving of 8s. on an outlay of 4d



If you intend to do big things with Water Glass this year, now is the time to get moving.

It is not a bit too early to start the campaign, and if you are prepared to make

A CONTRACT

for season's supply, we shall be happy to send a large quantity of the

COUNTER BILLS

printed with your name and address now, so that you may work up the demand in readiness for the season.

MAY, ROBERTS & CO. LTD.

7, 9 & 11 Clerkenwell Road
LONDON, E.C.

AND 16 WESTMORELAND STREET, DUBLIN.

*Established
over 150 years.*

A Name to Conjure with

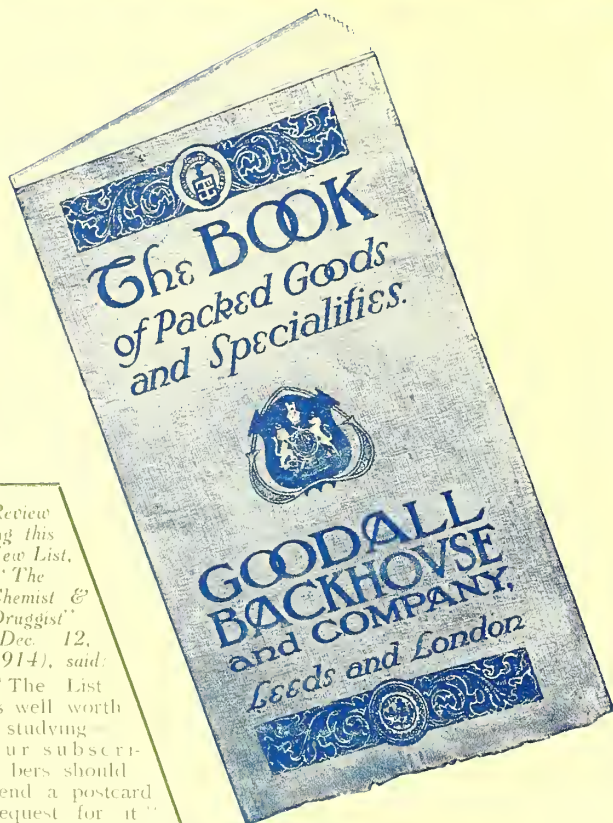
The name of Gosnell has for generations been synonymous with all that is best in British-made perfumery and toilet requisites. To-day, when patriotism is influencing people's buying as it has not done within living memory, Gosnell's British-made lines, and especially Society Eau de Cologne, are experiencing an unprecedented boom.

Keep a stock to meet the demand. Display Gosnell lines with our beautiful patriotic Union Jack Show Card (Eau de Cologne) to give your local public an opportunity to buy the British-made articles they are looking for.

Gosnell's Khaki Crown Crusade is the most effective selling scheme connected with the trade, and Society Eau de Cologne one of the best sellers in connection with this striking and original "Crusade." Write for particulars, which include a special offer of goods to you, with other effective "trade-aids."

JOHN GOSNELL & CO. Ltd.,
BLACKFRIARS ROAD,
LONDON, S.E.





Reviewing this New List, "The Chemist & Druggist" (Dec. 12, 1914), said: "The List is well worth studying our subscribers should send a postcard request for it."

GOODALL, BACKHOUSE and COMPANY. ❖❖❖

Proprietors of Yorkshire Relish, Goodall's Household Specialities, and Goodall's Packed Goods, Drug and Spice Grinders, Tin Box Makers, Drysalts and Druggists' Sundriesmen, Dealers in Pure Drugs, Chemicals, Essential Oils, Patent Medicines, and Pharmaceutical Preparations.

Higher Profits for 1915. ❖❖❖❖

THE more strenuous competition, the higher costs of stock, and the serious reduction of turnover which accompany War, make it plain that you *must* earn unusually high profits in 1915 if your business is to "win through" unscathed.

Your problem is therefore simply

How can I secure the essential high profits

on high-quality goods sold at competitive retail prices?—and the purpose of this List is to give you efficient help in the finding of an answer. In its pages, Profits of **50%, 60%** and even **70%** are common.

❖❖

Send a post-card for the List to-day to

**GOODALL, BACKHOUSE & CO.
LEEDS.**

A guarantee

Cadbury's Cocoa Essence

(unflavoured)

is absolutely pure & prepared only from the finest selected Cocoa